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Improving geriatric psychiatry services in primary care.

A study of multiprofessional training interventions

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ACADEMIC DISSERTATION

To be publicly discussed with the assent of the Medical Faculty of the University of Helsinki, in the auditorium of Lapinlahti Hospital, Helsinki, on June 13th, 2003, at 12 noon.

Helsinki 2003

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ISBN 952-91-5923-4 (paperback)
ISBN 952-10-1203-X (PDF), http://ethesis.helsinki.fi
Yliopistopaino
Helsinki 2003

Contents

Abbreviations

BDI	Beck Depression Inventory
C-L	Consultation- liaison
CME	Continuing/continuous medical education
CPD	Continuing professional development
CPE	Continuing professional education
DSM	Diagnostic and Statistical manual of Mental Disorders
EBM	Evidence based medicine
ECT	Electroconvulsive therapy
GP	General practitioner
HAM D	Hamilton Depression Rating Scale
ICD	International Classification of Diseases
PBL	Problem based learning
PDP	Personal development plan
RCT	Randomized controlled trial
SIP	Sickness Impact Profile

List of original publications

The thesis is based on four publications. The studies are referred to in the text by their Roman numerals.

I Saarela T, Viukari M. Psychogeriatric knowledge and training in primary health care. Nord J Psychiatry 1994; 48: 435-441.

II Saarela T, Viukari M. Attitudes of health care professionals towards care of the elderly. Int J Geriatr Psychiatry 1995; 10: 797-800.

III Saarela T, Kiviharju U. Evaluating the usefulness of training in psychogeriatrics. Int J Geriatr Psychiatry 1995;10:1019-1022.

IV Saarela T, Engeström R. Reported differences in management strategies by primary care physicians and psychiatrists in older patients who are depressed. Int J Geriatr Psychiatry, accepted for publication.

1. Abstract

Background: The challenge of increasing numbers of elderly in need of mental health services will not be adequately met without effective undergraduate education for all health professionals caring for elderly patients. There is a need for continuing professional training to keep the skills, attitudes and performance of care providers appropriate and update for recognizing and treating old age mental health disorders. There is also a need for more research on effective training approaches. This study set out to investigate the continuing professional education (CPE) of health professionals for old age mental problems. All phases of the study were conducted in an authentic environment as part of normal public health service activity.

Purpose and methods: The study comprises two series of interventions. Studies I ("Psychogeriatric knowledge and training in primary health care") and II ("Attitudes of health care professionals towards care of the elderly") aim at investigating the level of psychogeriatric knowledge and attitudes towards care of the elderly among primary care personnel before and after a multiprofessional continuing education intervention. In studies I and II two reference groups, psychiatry residents and nurses specializing in psychiatry, were included in comparisons. Evaluation of the effects of the education are included in study III ("Evaluating the usefulness of training in psychogeriatrics"). The second part of the study, study IV "Reported differences in management strategies by primary care physicians and psychiatrists in older patients who are depressed" explores single profession training interventions for groups of physicians and psychiatrists and includes a more detailed analysis of clinical management decision making in old age depression.

Two 5x 2h training courses with two different didactic approaches were arranged for 53 Helsinki City primary health care professionals and social workers involved in old age care. In a "case"-group participants presented their own patient cases for discussion and in a "lecture"-group a series of lectures on essential psychogeriatrics was given by the trainers. The Psychogeriatric Knowledge Test was translated and modified for the measurement of knowledge level. Nurses' attitudes to care of the elderly - test by Snape - was likewise translated into Finnish and used to assess the pre- and post training attitudes of all professional groups. Group comparisons were done using a pairwise t-test (BMPD 7D) and analysis of variance. The self-assessed effects of training were evaluated by analysing

data from semistructured interviews with all participants. A qualitative phenomenographic analysis was used to interpret the data collected. The MedStat chi-square -test was used to compare the participant background variables between the groups.

Study IV examines management strategies for geriatric depression by using case vignettes in focus group discussions. The management plans produced in focus groups of primary care physicians and psychiatrists were compared. A multimethod qualitative analysis was used to explore the data.

Results: The geriatric psychiatry knowledge level or the reported attitudes toward care of the elderly of the participating primary care physicians, nurses and social workers did not show significant changes as a result of the training intervention. This may be at least partially explained by the homogeneity of the groups and originally rather high scores on some sum variables. However, the knowledge scores did tend to improve. The discrepancy of pre-test knowledge scores between primary care training groups and reference groups (psychiatry residents and nurses specializing in psychiatry) diminished for some studied variables in post-training comparisons. The semistructured interview showed that most of the participants felt that they had benefited from the training and that they appreciated the multidisciplinary approach applied. They reported a more creative and flexible use of their knowledge. Increased symptom tolerance and increased appreciation of patients' choices was also perceived by the participants. The two different training methods (case-discussion and lecturing) applied did not produce any significant differences between the groups studied. The results of the fourth study showed differences between the professional groups in the number of treatment suggestions, in assessed stage of depression and in contextual thinking behind the decision making.

Conclusions: The focus areas for training for primary care professionals to emerge from this study are clinical assessment and psychopharmacology. With reference to training methods, the results of the study reflect a developmental process in the content and methods of continuing professional education on geriatric mental health in primary health care. The emphasis has shifted from producing trainer-planned educational events to more comprehensive and individualized personal development plans (PDP). However, the developmental approach demands that individual processes are embedded in multiprofessional collaboration. The multiprofessional approach and its appropriate application is favoured in order to optimize the benefits of care for elderly patients with multiple problems. The

multidisciplinary approach is closely linked to interprofessional collaboration which presumes a respectful and two-way learning -type of interaction between health care professionals.

Individual learning styles should be recognized by supporting mentorship types of activities and learning from collaboration with other professionals. Resources provided by guidelines and modern technology should be available for professionals working with elderly. Ensuring time and financial resources for professionals' PDP is a sine qua non for maintenance of an adequate mental health service system for the increasing numbers of elderly with mental disorders. The study showed the need for continuing professional education in old age mental health for primary care staff and emphasizes the importance of development and selection of appropriate and individualized training approaches.

2. Introduction

" No step to improve training will be too small" (Halpain et al., 1999).

It is well acknowledged that doctors and other professionals must continue to learn and develop skills throughout their careers. Advances continue to occur at such a rapid rate that without resources and time for continuing training professionals become out-of-date. Continuous professional development (CPD) is a necessity for all health professionals working with the elderly with psychiatric disorders (Sims, 1995).

The primary health care system in many countries is responsible for the initial assessment and management of common mental disorders of old age and occupies a strategic position in the care system. The primary care physician is often the first and only clinician providing mental health service to the elderly in ambulatory offices, general hospitals and long-term care environments. The competence of the primary health care personnel and nursing home care staff to meet this challenge varies, as does their basic training in mental health and illness in elderly (Alexopoulos, 1996; Woolley, 1997; Halpain et al., 1999; Fairbairn, 2002; Graham, 2002).

By the end of the 20th century continuing education for primary care physicians as well as psychiatry specialists had become an important part of the mission of most medical schools, health care institutions and national mental health organizations (Council Report, 1998; Hodges et al., 2001; Benbow, 2002; Royal College of Psychiatrists, 2001). In Finland, the requirement for all health professionals to keep their knowledge and skills update has legal weight in the form of the Law on Health Professionals (1994), which includes an obligation for continuing professional education (CPE): "A health professional is obligated to maintain and to develop his or her professional skill and stay updated with laws, rules and provisions concerning that profession".

Education in the wider sense, including professionals as well as the public at large, has always been an essential part of old age psychiatry programmes (Arie and Jolley, 1982; Lieff, 1983; Arie et al., 1985;

WHO 1996; WHO 1998). "The geriatric psychiatry specialist will become a competent teacher for the community at large in helping to identify problems, implement programs, and raise the level of general clinical expertise in dealing with the elderly who need complex multi-modal treatment " (Lieff, 1983). This educational objective brings along additional challenges concerning both teacher and learner qualities, substance knowledge, attitudes, complex skills required in practical work and the identification of suitable and efficient training methods. The development of a professional's multidimensional competence includes assessments of basic skills, clinical reasoning, expert judgement, management of ambiguity, professionalism, time management, learning strategies and teamwork as well as the institutional support, reflection and mentoring necessary for the development of assessment programmes (Epstein and Hundert, 2002).

The educational challenge raised in the early history of geriatric psychiatry has not faded during recent years. The numbers of geriatric psychiatrists are too small to meet the needs of the increasing population of the elderly in need of mental health service. Their role has been seen as consultants, teachers and researchers, but also as direct care providers for elderly patients (Jeste, 2000; Fairbairn, 2002). The ageing of the population and the projected shortfall of geriatric specialists (Small et al., 1988) will heighten the demand for primary care physicians trained in geriatric mental health (Kaplan et al., 2001; Cody et al., 2002). The evidence based medicine (EBM) approach is developing in geriatric psychiatry and contributing to both clinical practice and service provision (Banerjee and Dickinson, 1997; Draper, 2000).

The aim of this study was to investigate the challenges and effects of CPE on old age mental health issues in primary care. The study started as multiprofessional education (lectures, workshops) and proceeded to exploring a training intervention with a detailed focus on clinical reasoning and requirements for interprofessional collaboration and education.

3. Review of the literature

3.1 Mental health disorders in elderly

The numbers of elderly persons with significant psychopathological disorders are anticipated to nearly quadruple from 1970 to 2030 (Jeste et al., 1999). In terms of service activity, older people present a growing challenge. The most common mental problems, depression and dementia, with comorbid physical illness and disability, require particular professional skills as well as genuine multidisciplinary working approach (Woolley, 1997; Banerjee, 2001). In addition to depression and dementia the diagnostic and management challenges include coexisting depression and anxiety, subsyndromal depression, comorbidity of depression and medical conditions, behavioural disorders that cross conventional diagnostic boundaries, as well as detection of cognitive impairment (Gallo et al., 1997; Unützer et al., 1997; Borson et al., 2001; Alexopoulos et al., 2002). Except for dementia, the reported total prevalence rates of psychiatric morbidity in old age vary widely, which can partly be explained by uncertainty in assessment and restrictions in epidemiological investigations (Helmchen et al., 1999; Jeste, 2000). A meta-analysis of reported studies world-wide on people over age 55 and covering all clinically relevant depressive syndromes found a psychiatric morbidity prevalence 13.5% (Beekman, 1999). The focus in community studies is now on specific cohorts such as the very elderly, the subclinical disorders, and the validation of risk factors through longitudinal studies (Gallo et al., 1997; Richie and Mann, 2001; Borson et al., 2001).

The concept of geriatric psychiatry or old age psychiatry - formerly psychogeriatrics - grew out of the recognition that patients in long-stay wards of old mental hospitals deserved particular attention and gradually developed into the notion of a comprehensive and multidisciplinary community -oriented service (Gurland et al., 1988; Cohen, 1989; Council Report, 1998; Wilms et al., 2000; Fairbairn, 2002). The rising numbers of elderly people will produce an increase in numerical and quality demand for geriatric psychiatry services. New demands for services may emerge: as prejudicial attitudes about psychiatric treatment are expected to decline, there will be a corresponding increase in the number of seniors seeking psychotherapy (Kennedy et al., 1999). The importance of research into old age mental health and its service models is obvious (Borson et al., 2001).

3.2 The practice of geriatric mental health services in primary health care

3.2.1 Detection and treatment of geriatric mental disorders in primary health care

Studies exploring the diagnosis and management of geriatric mental disorders in primary care often conclude with recommendations for further training of the primary health care professionals as a result of deficiencies found in their knowledge and skills. The primary care doctors may recognize depressive symptoms but explicit diagnoses are seldom done. Of 350 patients aged 70 or over attending a primary care physician's consultation, 16% had dementia or another mental disorder (12% depression, 11% anxiety disorder) (Olafsdottir et al., 2001). A prospective cohort study showed that general practice consultation rates for psychiatric disorder in patients aged 65 and over were only 4.4% of all consultations, and were highest for neurotic disorders and depression and very low for schizophrenia. Those living alone had the highest rate for depression, whilst those living in residential and nursing home had substantially higher consultation rates for dementia and bipolar affective disorder (Shah et al., 2001). According to several studies, 12% - 71% of depressive elderly cases are identified in primary care (MacDonald, 1986; Woolley, 1997; German et al., 1987; Crawford et al., 1998; O'Connor et al., 2001a; Olafsdottir et al., 2001).

The number of the persons receiving treatment is much smaller still. Lack of recognition is not the only barrier to treatment of geriatric depression (Ryan et al., 1995; Callahan et al., 1996; Crawford et al.,1998). Possible explanations for not making a diagnosis of mental disorders in symptomatic geriatric patients include lack of adequate counselling time (Alexopoulos, 2001; Olafsdottir et al., 2001), inadequate training to diagnose and treat geriatric psychiatric disorders (Jeste et al., 1999; Bartels, 2002), lack of effective, time-limited protocols and screening tools (Watts et al., 2002), atypical presentation of depression in older adults (Gallo et al., 1999), mental disorders seen as stigmatizing patients (Gallo et al., 1999), and physicians' attitudes concerning both their role as service providers and the efficacy of treatments available (Woolley, 1997; Pitt, 1996). There is also an obvious need for ongoing education of primary care doctors on the follow-up and course of mental disorders (Ben-Arie et al., 1990). Improved recognition and treatment of late life mental problems is likely to improve the quality of life of those with depression and possibly their family members; it is not necessarily cheaper than current treatment but more cost-effective (Unützer et al., 1997).

Elderly persons have very low levels of help-seeking because of the character of the disorders, underreporting the symptoms, comorbidity and isolation (Lyness et al., 1995; Richie and Mann, 2001). The elderly patient and his or her significant others have an important role not only in recognition of mental symptoms but also in treatment compliance (Damestoy et al., 1999; Alexopoulos et al., 2002).

Psychological embarrassment, lack of "psychological mindedness", male gender and hesitation to trouble the doctor as well as the doctors' interview techniques may be barriers to not reporting emotional or depressive symptoms in general practice consultations (Cape and McCulloch, 1999; O'Connor et al., 2001b). There may be differences between "psychological" and "somatic" presenters. Personality and childhood experience may be associated with specific types of adult illness behaviour (Weich et al., 1996). Personal interest of doctors in their patients' life has been found important for interaction but the expressed interest will probably not in itself reduce somatisation brought to the consultation by the patient (Cape, 1996; Schilte et al., 2001). Studies of primary care consultations have shown that psychosocial and emotional issues appear rather infrequently in conversations between a patient and doctor (Mishler 1984; Frankel, 1995; Aronsson et al., 1997; Engeström, 1999a). There may, however, be interindividual differences as suggested by Glasser and Gravdal (1997), who found that older physicians were more likely than younger physicians to agree that inquiring into the emotional status of their patients was intrusive.

Differences between doctor and nurse attitudes have been found on old age depression, the doctors being more likely than nurses to consider depression to be associated with deprivation in earlier life, to emphasize biochemical abnormality, to trust the effect of antidepressants and to be confident about dealing with depressed older people (Livingston et al., 2000). It is worth noting, however, that primary care physicians and other specialists than psychiatrists may detect and respond to psychological distress in ways other than standard psychiatric diagnosis and treatments, but that have therapeutic quality none the less (Collings, 2001; Klinkman and Okkes, 1998).

The confidence of primary care doctors in recognizing and treating old age mental health disorders has been variable (Glasser and Gravdal, 1997; Rothera et al., 2002; Cody et al., 2002). Gallo et al (1999) studied the self-reported attitudes, knowledge and behaviour of physicians and found that medicines were felt to be just as effective for older patients as for young; but the respondents were more uncertain

about the benefits of psychotherapy for the elderly. Selective serotonin re-uptake inhibitors have been found by far the most commonly mentioned medications for the treatment of depression in older adults (Gallo et al., 1999; Rothera et al., 2002), suggesting a difference when compared with earlier self-reports of prescribing practices (Orrel et al., 1995; Butler et al., 2000).

Soumerai (1998) suggests that improving the detection of mental disorders and underuse of mental health treatment may prove to be a more difficult training objective than, for example, reducing the overuse of unnecessary medications. It is important to recognize that other health professionals, not only doctors, have an essential role in detecting mental disorders in community (Sharkey, 1997; Banerjee, 2001).

3.2.2 Collaboration between primary health care and psychiatric services

Referral practises vary and are connected with the resources and guidelines available (Pitt, 1996; Whooley and Simon, 2000). Numerous reasons for low referral rates have been suggested, ranging from the attitudes of physicians and patients to differences in symptom tolerance, the unclear role of mental health centres to primary care doctors, geographical or personal inaccessibility of a consulting psychiatrist or the perception that consultations may simply not be helpful (Krasnik et al., 1992; Gallo et al.,1999; Buchanan and Bhugra, 1992; Marshall, 1998; Alexopoulos et al., 2002). Two main processes of referrals were generated in a qualitative study exploring decision making for referrals in patients with mild depression and/or anxiety (Nandy et al., 2001). Emotional responses were often used for "referrals away" and more intellectual decision making for "referrals to". Many physicians used both strategies. Most general practitioners indicated that they would first initiate treatment for a period and then refer. Targeting referrals at those elderly most likely to benefit from psychiatric services is a challenge (Arthur et al., 2002) as is the development of effective modes of referral (Ball and Box, 1997).

The compliance follow-up rate in homebound elderly mentally ill patients was significantly greater with primary care physicians (75%) than with psychiatrists (41%). This possibly shows patient preference for a primary care service, which reinforces the importance of training primary care

physicians in the diagnosis and management of mental disorders in elderly patients (Habib et al., 1998). Middle aged primary care patients seeking help for emotional distress almost always want an opportunity to consult their primary care physicians and are much more less likely to want medication or referral to a psychiatrist (Brody et al.,1997).

There was no difference in outcome between elderly depressives treated by a community multi-disciplinary psychogeriatric team or continuing management by their general practitioner (Jenkins and Macdonald, 1994). On the other hand, Banerjee et al. (1996) found in a well-designed randomized controlled trial that after a six-month follow-up 58% of depressed frail elderly receiving an intervention by a psychogeriatric team recovered from their depression, compared with only 25% of those receiving unsupplemented general practitioner care. The study did not address the question of what impact individual elements had on the intervention.

Collaborative mechanisms have been developed to facilitate the diagnosis and treatment of depression in primary care. Collaborative care has been defined (Katon et al., 1997; Katon et al., 1999; Von Korff et al., 1997) as a systematic approach that improves patient education and integrates mental health professionals or other care extenders, such as nurses, into the primary care clinic to help primary care physicians to provide treatment in conformity with evident based guidelines. Collaborative care is considered to be an essential part of old age mental health services (Engedal, 2000; Schulberg et al., 2001; Rosenvinge, 2002). Collaboration is similar to effective team work and according to Headrick et al. (1998) includes attainable, shared vision, clear, shared objectives, mutual support, effective participation, task orientation, information and appropriate management structures and support for innovation.

An internationally reported multi-site study project (PROSPECT) is directed at older depressive patients at risk of suicide. A central element of the project is a health specialist who collaborates with primary care physician and has access to psychiatric consultation (Alexopoulos et al., 2001; Schulberg et al., 2001). The role of the health specialist includes educating elderly patients, families and physicians on depression and suicidal ideation (Schulberg et al., 2001; Alexopoulos et al., 2001; Baldwin et al., 2002). Improvements in communication, liaison and drug management were reported as a result of an intervention practice of a community psychiatric nurse employed by a general

practice to coordinate care of discharged long-stay psychiatric patients resettled in hostels (Bruce et al., 1999). Interventions that cross service and professional boundaries can only work if services work together closely (Arthur et al., 2002).

3.2.3 Summary of the studies on practice of detection and treatment of geriatric mental health disorders in primary health care

Serious deficiencies have been found in the recognition and treatment of mental disorders in the elderly. The elderly themselves are likely to underreport their symptoms. Lack of time and deficient interaction skills on the part of the primary physician may be a barrier to detection of mental problems. Inadequate basic training of professionals in geriatric mental health may contribute to the low rate of treatment. Physicians working in primary health care seem not to have enough knowledge and skills to use psychosocial treatment methods for the benefit of their elderly patients. Referral practices vary and need time to develop to be truly functional, and there may also be economic restrictions limiting primary- secondary health care collaboration. New models of co-operation between primary health care and psychiatric services are being developed.

3.3 Specialized psychiatric services for the elderly

Most of the hospital-based and out-patient psychiatry services for the elderly have been provided by general adult psychiatry (Council Report, 1998). As general psychiatrists will also in the future be the major providers of old age psychiatric care the general psychiatry residencies should provide adequate training experiences in geriatric psychiatry and expand efforts to train geriatric psychiatrists (Halpain et al., 1999; Colenda et al., 2002). Undergraduate training in psychiatry usually provides a workshop on geriatric psychiatry. While engaged in old age psychiatry education programmes - as in geriatrics education - the students, especially the inexperienced, should have an opportunity to meet healthy elderly, too, to promote positive attitude change toward the elderly (Adelman et al., 1992).

There is usually no mandatory geriatric psychiatry rotation for psychiatric residents. In a survey on postgraduate education in psychiatry one of the five Finnish universities approached announced

specific knowledge objectives for geriatric psychiatry (Saarela, 1999). Geriatric or old age psychiatry is acknowledged as a speciality in psychiatry in several countries, the United Kingdom having the longest tradition (Reifler and Cohen, 1998). In Finland, the subspeciality status was abolished in 1998.

The geropsychiatric clinical nurse specialist is a professional prepared to work within any setting serving the emotional needs of elderly, and can offer administrative, clinical, educational and research expertise; but no certification in geropsychiatric nursing is available (Ebersole, 1989; Halpain et al., 1999). In the United Kingdom, gerontological nurse specialists are senior nurses with at least two years comprehensive experience in the care of older people (Fairbairn, 2002). In clinical nursing practice, the knowledge base needed has been described as broad empirical knowledge deriving from the fundamental sciences, tacit knowledge utilizing intuition and holistic problem solving, and broad experience as well as observation, psychosocial and psychomotor skills (Neal et al., 2001). The necessity of continuing education in geriatric mental health for nurses in all practice sites that serve older persons has been pointed out (Harper and Grau, 1994). In Finland the nursing colleges can independently construct their educational programmes. The training available in psychiatry and old age care can vary greatly.

The contribution of social work professionals to assessment, treatment and care of elderly has been divided into three main areas: the socio-economic context, legal issues and care management of individual clients (Bradshaw, 2002). The courses offered in social work programs in ageing do not necessarily contain information about mental health issues (Halpain et al., 1999). Practical descriptions of mental health social work in a multidisciplinary team are available (Butler, 2001).

The services offered by psychologists vary depending on the availability and training of the psychology staff and the clinical unit where they operate. The role of psychologists working with older people is continuing to develop. Possible areas for development include a role in primary care, health promotion and prevention of depression (Martin, 2001). There are opportunities available for utilization of psychosocial techniques, collaboration with other health professionals and organizations and for development of alternative approaches to addressing primary care health problems (Speer and Schneider, 2003). An increasing number of clinical internships offer rotations in treating late-life disorders (Halpain et al., 1999).

In an old age multidisciplinary team all participants are expected to contribute equally valid knowledge and expertise from their professional and personal experience to their work groups (Davies, 2000; Rolls et al., 2002).

Although being the main psychiatry service providers for the elderly, the general psychiatrists have tended to regard elderly patients as less than ideal for their practice, with their poorer prognosis and less likelihood to benefit from psychotherapy (Ford and Sbordone, 1980). However, the number of psychiatrists reporting geriatric patients in their practice has increased markedly in recent years (Colenda et al., 1999). At the present time, psychiatrists do not appear to be negatively biased by the patient's age when it comes to providing psychotherapy services, which may reflect a change in thinking and attitudes (Colenda et al., 2002). The psychiatrist needs to maintain competence in recognizing how medical and psychiatric comorbidity influence clinical presentation, treatment and outcomes of elderly patients with mental disorders (Colenda et al., 2002).

A modern comprehensive old age psychiatry service would include the following components: work with people in their own homes, out-patient clinics, day hospitals and day care, admission beds, long-stay and respite care admissions, liaison services, links with other agencies in the community and teaching and learning (WHO, 1996; Council report, 1998). When both general psychiatry and geriatric psychiatry service models are available, there is a need for flexible delineation of clinical responsibilities between the two specialities (Banerjee, 2001).

3.4 Continuing professional education

The basic notion of continuing medical education (CME) is to help physicians keep pace with rapid developments in medical knowledge. The educational methods used include lectures and seminars, small group teaching, study of educational materials, distance education and academic detailing (Nikkarinen, 2002). The demand for CPE for nurses arises from a similar background: role boundaries between the health care professions are in state of flux, nurse education is moving into higher education and the need for updating is increasing in parallel with the complexities of clinical science (Jordan et al., 1999a). While discussing reviews of CPE in nursing, Jordan et al. (1999a) point out that CPE is most likely to be effective if the changes proposed are incremental and congruent with existing

practice. Whatever the details of the method, a strategy that promotes self-directed learning is likely to be the most effective (Spencer and Jordan, 1999).

There are various approaches for CME, from transfer of information to methods based on decision making theory as summarized by Denig et al., (2002), Table 1:

Table 1. Approaches for continuing medical education (Denig et al, 2002)

Approaches based on the transfer of information: • Educational material (journals, books, reviews, drug bulletins, practice guidelines) • Oral presentations (conferences, courses, lectures, expert led teaching)
Approaches based on principles of adult & social learning, and behavioural change: • Interactive learning (outreach visits, small group discussions, local consensus building) • Professional stimulation (examples from successful changes from peers, mentoring, opinion leaders) • Self-directed and experiential learning (portfolio-based learning, "on-the-job"-learning, problem-based learning) • Audit and feedback on performance (self-assessment, structured reflection, peer review) • Reminders (verbal, paper or computerised reminders) • Marketing or tailoring approach (identifying and addressing factors enabling or impeding change)
Approaches based on decision making theory: • Training in clinical reasoning (learning a systematic approach, de-biasing judgements) • Decision support (decision trees, decision rules, computerised support systems)

The change in approach reflects the influence the adult learning theories have on CME: it is not teaching but learning that leads doctors to change their practice; education is regarded as facilitating learning, not only as instruction (Fox and Bennett, 1998). The strategies presented can be seen to reflect a developmental perspective. The focus of the training progresses from a more passive form ("transfer of information") via interactive methods to clinical judgement analysis. This outlining, however, still needs further elaboration and enriching in order to be successfully applied to educational interventions relevant for care of elderly with mental disorders. Inclusion of the “multivoicedness” of

clinical activity (Engeström, 1999a) and a more comprehensive understanding of the simultaneous multiple factors present in actual clinical situations could be beneficial for CME trainers.

Problem based learning (PBL) is understood to mean an instructional strategy in which learners identify issues raised by specific problems to help understanding about underlying concepts and principles. The PBL curriculum may include small-group learning, student-directed learning, lifelong learning, co-operative learning, context grounded learning, patient-centred learning and community-centred -learning. It involves learning in small tutorial groups and encourages medical educators (tutors) to learn to use their expertise to facilitate adult learning (Maudsley, 1999). Educational objectives possible with PBL include structuring of knowledge for use in clinical contexts, and the development of an effective clinical reasoning process and of effective self-directed learning skills and increased motivation for learning (Barrows, 1986). PBL begins with the problem and favours teaching in the context of clinical problems. However, problem based -learning as it is practised is actually a collection of educational principles and procedures, and refers both to an educational method and an approach to education (Nikkarinen, 2002; Maudsley 1999; Spencer and Jordan, 1999).

There is much agreement that practice-based education should be encouraged, although the data mainly covers other than psychiatric practices. Cunningham (1995) describes a practice-based learning programme with a series of working health team-originated educational meetings which demonstrate the feasibility of interdisciplinary training for established professionals. The working group has thus become the learning group. One interprofessional practice-based learning project used a continuous quality improvement approach to achieve changes experienced as important. A qualitative enquiry showed changes in relationships and teamworking extending beyond the specific topic of the project (Wilcock et al., 2002). Acknowledging the deep understanding and tacit knowledge the team members have is of outmost importance. Multidisciplinary team work objectives are included in the recommended continuing professional development (CPD) programme for psychiatrists (Royal College of Psychiatrists, 2001)

Small group tutorials have been found to have an effect on physician behaviour (Gask et al.,1987). The benefits of mentorship as an instrumental tool for individual's professional progression, for the mentor, the organization and the profession have been emphasized (Silver et al., 1990). Mentors may be more

effective in educating physicians about specific areas of practice in which they have expertise (e.g. prescribing drugs) than when offering broad consultations (Borgiel et al., 1999).

Education was seldom mentioned by primary and secondary care clinicians as a reason for change in referral practice, but more often mentioned in management and prescribing changes (Allery et al., 1997). These authors - whose conclusions have been challenged (Poses, 1997) due to the lack of a control group - suggest that evaluation of an educational event should include an investigation whether the intervention had been one of a number of factors which led to a change, not whether the event on its own led to a change (Allery et al., 1997). Primary care physicians, hospital doctors and consultants may rely on different sources of CME and show differences in their information seeking behaviour (Allery et al., 1997; Nylenna and Aasland, 2000).

The definition of outcomes is a requirement for evaluation of an educational event (Wilkes and Bligh, 1999). The relation between quality of education of health professionals and patient outcome is not well understood (Olesen and Hjortdahl, 1999; Nikkarinen, 2002; Davis et al., 1999) although models for ensuring medical behaviour change have been proposed: consideration of predisposing factors, which prepare doctors for change, identification of enabling factors by which new knowledge and skills are related to the learner's work environment and reinforcement of new behaviour through the use of reminders and feedback (Davis and Taylor-Vaisey, 1997; Cantillon and Jones, 1999). A review of 99 trials containing 160 CME interventions showed that 70% led to a change in physician performance and almost half (48%) produced a positive change in health outcome (Davis, 1998). The clinical work of psychiatrists was lacking from this meta-analysis although some studies included focused on psychological or psychiatric issues in primary and long-term care.

A recent Cochrane review of continuing education meetings and workshops (Thomson O'Brien et al., 2002) included 32 studies with 2995 health professionals. The reviewers conclude that interactional workshops can result in moderately large change in professional practice, whereas didactic sessions (mainly lectures or presentations) alone are unlikely to change professional practice. Although the evaluated didactic presentations did not show an effect upon professional practice, this finding does not say anything about the possible improvement of knowledge. In comparison of two teaching techniques paediatricians attending case presentation sessions were more likely to increase their

cognitive knowledge than physicians attending lecture session, but the retention of information was found to be deficient (Greenberg and Jewett, 1985).

New research done on the applicability of EBM in educational development refers to the importance of both practical wisdom and research evidence as requirements for educational development (Greenhalg et al., 2003).

3.5 Mental health training in primary care

A critical review of literature on interventions to improve provider recognition and management of mental disorders in primary care by searching MEDLINE database (1966-1998) found 27 randomized studies and 21 quasi-experimental studies (Kroenke et al., 2000). The three major intervention categories were "predisposing" (simple educational strategies such as lectures, workshops, courses etc), "enabling" (aiming at improving provider behaviour at the time of the visit, supervision of real patients etc.) and "reinforcing" interventions (providing feedback on provider's actual performance). Improved diagnosis of mental disorders was reported in 18 out of the 23 studies, improved treatment in 14 out of 20 studies and clinical improvement in psychiatric symptoms or functional status was documented in 4 of 11 and 4 of 8 of the studies, respectively. The heterogeneity of studies complicated the interpretation of the results and the authors were unable to demonstrate an association between efficacy of an intervention and any specific variables. However, Kroenke et al. (2000) conclude that multifaceted interventions may by more effective than single interventions, interventions should be conducted on site and be ongoing and greater attention is suggested to efforts to tailor interventions to particular provider needs.

A review based on searching the MEDLINE and PsycLIT databases 1950-2000 on psychiatric knowledge, skills and attitudes of primary care physicians used a wide range of subject headings, though excluding articles on training of psychiatrists (Hodges et al., 2001). Ongoing, interactive and contextually relevant continuing education was found to beneficial. Hodges et al. (2001) conclude that organizational and attitudinal issues may be equally or more important for educators to consider than the selection of educational methods.

In Table 2 there are examples illustrating different CME- training interventions aiming at improving management of psychiatric disorders in primary care.

Table 2. Examples of psychiatric training interventions in primary care

Study	*Design and participants*	*Training intervention*	*Outcome measures*	*Results*	*Comment*
O'Boyle et al, 1995	A pre-training-post-training test design, 423 health professionals (physicians, nurses, social workers, psychologists, counsellors	A two-day programme; expert presentations, videotaped patient interviews, small group discussions	20 -item knowledge test on depression	Scores increased significantly from a pre-test mean (53%) to a post-test mean (67%) t=13,9, df= 273, p <.001.	343 completed pre-test, 286 post-test
Thompson et al., 2000	Randomized controlled trial; RCT; 60 primary care practice teams	Educational seminars to practice teams, educators available for the implementation of clinical-practice guideline	Quality assurance: participant questionnaires, seminar rating Clinical outcome measures: recognition of depression, improvement of patients	Education did not increase the recognition of depression by physicians; no improvement in recovery rates	

Table 2, continued

Study	*Design and participants*	*Training intervention*	*Outcome measures*	*Results*	*Comment*
Richardson et al., 2002	RCT, 86 nurses, care assistants and social workers	2 groups: educational course and printed educational material	Questionnaires pre-and postintervention on knowledge and attitudes	Educational course improved, printed material group deteriorated	education needs to be targeted to take into account the baseline knowledge
Rutz et al., 1997	All general practitioners in Gotland	20-h lecture course in depression diagnostics and treatment for primary care physicians	Measurement of sick leaves and hospitalisations due depression, drug prescriptions, suicide rates	Increase in antidepressant use, decrease in suicide rate	Benefits largely restricted to women in contact with general practitioners; effects faded during 3 year follow -up
Kiuttu et al., 1999	Controlled intervention study, pre- and post-training measurements, health centre personnel	3-day training with lectures, seminars and multiple materials	General practitioners' (GPs) evaluation of need of treatment for depression vs Beck Depression Inventory (BDI); assessment of practice orientation	General practitioners recognized patients needing depression treatment even seldom after the training course than before it	

Forty outcome studies were identified on the effect of on-site mental health professionals on the clinical behaviour of general practitioners. The findings showed the effects to be modest, inconsistent and be restricted to patients directly under the care of the mental health professional (Bower and Sibbald, 2000a).

Improvements in the skills and knowledge of primary care practitioners have been sought through shared care -models. Shared- care models of care seem to be a rather natural option in geriatric care because of the multiple problems and common comorbidity of the patients. Shared-care models are needed as they may provide increased accessibility to psychiatric consultation, enhanced continuity of care, increased support to the family physician and improved communication. However, they demand

new skills of the participating psychiatrists, who need to be comfortable in assessing individuals of different ages and with a variety of problems and diagnoses, and must conduct an efficient, focused consultation and develop an immediate management plan translated into the language of the patient and the primary care provider (Williams, 1994; Kates et al., 1997; Gallo et al., 1997; Marshall, 1998; Lawrie et al., 1998; Cowley et al., 2000). A randomized trial on stepped collaborative care for primary care patients with persistent symptoms of depression focused on pharmacological treatment (Katon et al., 1999). The intervention group received enhanced education and increased frequency of visits by a psychiatrist working with the primary care. This multifaceted program was found to significantly improve adherence to antidepressants, satisfaction with care and depressive outcomes compared to usual care (Katon et al., 1999). The collaborative approach involves a two-way educational starting point: mutual respect, the possibility to learn from each other, and understand each other's skills as well as the demands and limitations under which each works (Kates et al., 1997; Cowley et al., 2000).

Studies covering the educational effects of consultation-liaison (C-L) - psychiatry in primary care have found the effects relatively modest in scope, more reliably associated with multifaceted and more intensive C-L interventions and emphasizing the potential educational role of C-L- activity (Carr et al., 1997; Bower and Sibbald, 2000b). Establishment of good liaison arrangements as such may allow a "quasi-educational" culture to develop (Fairbairn, 2002). Rand and Thompson (1997) propose a co-operation with four model varieties. The "consultation model" is best suitable for patients whose disorder is already recognized while the "liaison model" may best work with staff problems created with difficult patients. The "bridge model", where the psychiatrist spends much time with the primary team and can be identified as a team member, addresses both recognition and management problems, is educational both for the primary care team and the psychiatrist and it also represents an integrated work approach. The "hybrid model" includes non-physician mental health specialists, and offers a variety of treatment options and potential cost savings, as does the "autonomous" model where a primary care programme hires a mental health professional to run a teaching programme.

The willingness and motivation of primary care doctors for training in psychiatry is not self-evident (Kiuttu et al., 1999; Livingston et al., 2000; Damestoy et al., 1999). Kiuttu et al. (1999) noticed that the general practitioners' originally low sensitivity in detecting depression decreased after the 3-day training course. As possible explanations they suggest joint training with other staff members and the

proposed treatment schema, which may have been experienced as too demanding, and may have raised the threshold to recognize depression and participate in the intervention. Another explanation for low motivation may the incompatibility of expectations: the psychiatry specialists are often eager to offer training on subjects that are felt less relevant by trainees, who are looking for help on complicated and chronic cases (Hodges et al., 2001).

The limited data on elderly depressives suggest that educational packages offered by a nurse to primary care physicians, and feedback on screening test results, are insufficient to instigate a change in practice (Livingston et al., 2000; Baldwin et al., 2002). However, a suitably trained nurse or a shared-care intervention offering education for health care providers is associated with improved outcomes in primary care, hospital liaison, and nursing homes (Blanchard et al., 1995; Rabins et al., 2000; Llewellyn-Jones et al., 2001; Baldwin et al., 2002; Ballard et al., 2002). A continuing professional education programme on medication management for community mental health nurses helped them to expand their professional role for the benefit of their clients and revealed self-perceived needs for more education in pharmacology (Jordan et al., 1999a; Jordan et al., 1999b). A study on nurses' confidence in dealing with mental health calls, and knowledge and attitudes to mental health showed increased confidence and change in attitudes after a training course(Payne et al., 2002). Knowledge scores improved but the change was not statistically significant. The recommendations arising from the studies accord with a summary given by Hodges et al., (2001) which is presented in Table 3.

Table 3. Recommendations to improve the quality of continuing psychiatry education for primary care physicians (Hodges et al., 2001):

1. Before setting learning objectives, a needs assessment of the physicians who will participate must be conducted
2. Course planner should involve leaders in primary care who can help define relevant competencies
3. Psychiatrists teaching primary care physicians should familiarize themselves with the context of primary care
4. Objectives should be created for each of the domains of knowledge, skills and attitudes and worded in behavioural terms
5. Particular attention should be paid to attitudinal issues

6. Learning should be tied to real practice
7. Learning methods should be interactive and involve practice of new skills under observation
8. The degree to which learning has occurred should be evaluated
9. The measures of patient outcome evaluation should be found and used
10. Programs should be ongoing

3.6 Training interventions on geriatric mental health in primary care

Ensuring geriatric psychiatry services is a key element for primary health care consultation, collaboration and education. The commitment of old age psychiatry to teaching tasks is essential: the teachers at every level of medical education should be able to instil learners with commitment to lifelong professional development (Arie et al., 1985; Breedlove and Hedrick, 1998). Training in geriatric mental health should be improved at various levels, including future primary care clinicians (medical students, residents, nurse practitioners), researchers, policy makers and the lay public in issues related to geriatric mental health (Arie et al., 1985; Council Report, 1998; Jeste et al., 1999).

Geriatric psychiatrists seem to place most emphasis on using common clinical problems of the speciality as a way of teaching medical students. The enthusiasm felt for old age psychiatry by geriatric psychiatrists may contribute to constructive attitudes in clinical work (Gregory and Dening, 1995).But enthusiasm is not enough: teachers must have adequate training to be able to choose the appropriate CME methods based on specific target groups and stated aims (Edwards et al., 1988; Olesen and Hjortdahl, 1999). Among newly appointed psychiatrists and geriatric psychiatrists general management, personal management, dealing with complaints, difficult professional relationships, recruitment and disciplinary proceedings and information technology have been listed as deficient areas in specialist registrar training programs (Haddad and Creed, 1996; Benbow, 2002).

The clinical practice of geriatric psychiatry not only requires the skills of various professionals but presumes a good multidisciplinary collaboration (Busse 1987; Council Report, 1998; Blazer, 2000; Fairbairn, 2002). The deficiencies of training opportunities as well as new educational developments offered in geriatric mental health for doctors, nurses, psychologists and social workers have been pointed out (Halpain et al., 1999; Stiller-Harms, 2002). Definition of objectives starting from the

undergraduate level, is, however, essential. Without a clear definition of the desired interprofessional working practices, higher education cannot develop the pedagogical approaches which underpin it (Finch, 2000). Interprofessional programs have to address the challenges presenting for educators, such as poor communication between the participants, conflicting power relations and role confusion (Rolls et al., 2002).

The usual response to the acute need for geriatric -specific services and education in the community has been to conduct workshops and seminars for healthcare professionals and provide consultations for organizations. A long-term perspective ensures basic education in old age mental health to provide professionals with the knowledge, skills and appropriate attitudes they need to meet the challenges in clinical work (Reuben et al., 1995; Johnston et al., 2002

In geriatric psychiatry there is a need for a functional services research, a need for research on the development of interdisciplinary training programs, a need for very early career preparation in research and for the development of multidisciplinary collaborative models of care (Gallo et al., 1997; Borson et al., 2001). Awareness of the multivoicedness in understanding and communication may assist in the desire to know and to be curious - a requirement for interprofessional collaboration (Engeström, 1999b). A balance needs to be found between single profession and multiprofession continuing education - education for one profession at time may be felt to strengthen the experience of professional identity, as found in survey of Norwegian psychiatric nurses (Borge et al., 1997).

Clinical epidemiology, the explorations of the interaction among physician, patient and practice environment in detecting, managing or even preventing mental health problems, exploring the interface between primary care physicians and mental health professionals by identifying optimal models of collaborative care, and aiding two- way learning have been included in the primary care mental health research agenda (Klinkman and Okkes, 1998; Allery et al., 1997).

Differences in health care professionals' attitudes may create unnecessary barriers and prevent service development. General practitioners were found to see dementia as mainly a social problem, while consultants in old age psychiatry seemed not to separate the medical and social aspects in the provision of care (Wolff et al., 1995). These findings have implications for continuing education: geriatric

psychiatry has the responsibility to convince other professions in primary care of the benefits of more efficient use of psychiatric services for their elderly patients.

The dearth of psychological treatments available for the elderly is well-known. It has been suggested that the old age psychiatry, or psychiatry units associated with services for the elderly, should themselves first orientate with the psychological treatment approaches (Stern and Lovestone, 2000).

Recommendations in geriatric psychiatry educational programmes for primary care CME emphasize detection of mental disorders and issues relating to medication side-effects and drug-safety (Butler et al., 2000; Olafsdottir et al., 2001). In Table 4. there are examples of interventions illustrating geriatric psychiatry training in primary care.

Table 4. Geriatric psychiatry training interventions in primary care

Study	*Design and participants*	*Training intervention*	*Outcome measures*	*Results*
Callahan et al., 1994	Randomized controlled trial of physician targeted interventions in primary care	Individual physicians provided with 3 special visits scheduled to address the elderly patient's depression	Frequency of diagnosing depression, medication , HAM-D, SIP-scores	Recognition and treatment of late-life depression improved in intervention group; no effect on patient outcomes
Smith et al., 1994	Geriatric Mental Health Training Program for nursing personnel in rural long term care facilities; Training the trainers; Pre- and post-test evaluations on participant (trainers and trainees) satisfaction, knowledge, attitudes	Six educational modules (PBL), telecommunication, educational package, intensive training sessions, case consultation	Evaluation of participant satisfaction, knowledge and attitudes	Significant increase in pre-test knowledge scores, pre-post-test attitudes no significant changes, high expressed satisfaction

3.7 From continuing medical education to continuous professional development

To promote CPD in clinical practice requires real motivation in real contexts, and understanding the processes of learning. Learning is a broader concept that acquisition of knowledge, and must take into consideration individual learning needs and motivational factors (Taylor, 2001; Holm, 1998; Campion-Smith et al., 1998; Linsley et al., 2001). The techniques used in the assessment of primary care physicians' educational needs have been mostly questionnaires, seldom oral interviews (Kerwick et al., 1997; Myers, 1999), while the most acceptable assessment of educational need in the future is likely to be based on evidence from a range of sources (Hodges et al., 2001; Cantillon and Jones 1999). The options for health staff development should also be extended to staff with the least formal professional education (Fairbairn, 2002; Kaasalainen, 2002).

The improvement of doctors' learning process and the quality of medical education has been the subject of much controversy (Holm, 1998). CME is seen as representing a more teacher based, didactic style whereas continuing professional development implies a more learner-centred and self-directed approach to learning (Taylor, 2001; Cantillon and Jones, 1999).

Learning and developing are related, yet different. CPD emphasizes development - the unfolding, growth and realisation of an individuals' capacities within his or her life span rather than learning items of knowledge only. It is important to recognize the adverse reactions which usually exist in all learning groups and the possible different levels of competence within the group. Recognizing the intrinsic difficulties in learning may be helpful. Table 5 illustrates emotional factors connected with the learning process described by Taylor (2001).

Table 5. Perspectives on learning and emotional conflict (Taylor, 2001)

• All learning situations are emotionally highly charged - learners tend to feel very anxious of not knowing or appearing inexpert.
• Accepting the need to learn new things and gain new skills is intrinsically difficult
• Powerful ambivalent attitudes of love and hate exist towards knowledge
• If learning new data leads to a paradigm shift it will be experienced as a threat; at these points, pre-existing personal identities and views of the world can no longer be maintained and new adjustments have to be found

CPD is essential in all professions that require maintenance of knowledge and skills by study throughout an individual's professional career (Royal College of Psychiatrists, 2001). It is not obvious that individual professionals, such as psychiatrists, will search out continuing education in their areas of weakness (Carter, 1990). The Royal College of Psychiatrists (2001) has created a policy for the CPD of psychiatrists and is emphasizing Personal Development Plans, for which models and guidelines are provided. Life-long learning is strongly supported in old age psychiatry. CPD should be in accordance with the job and its requirements and it may also help the old age psychiatrist to cope with the stress of the work (Benbow, 2002).

3.8 Clinical decision making

The rational treatment of any patient is determined by the three principal decisions: identifying the ultimate objective of treatment, selecting the specific treatment and specifying the treatment target (Sackett et al.,1991). Clinical teaching has shifted from lectures describing diseases and treatments to the devising strategies (guidelines) for case management, setting priorities and seeking the best evidence.

Guidelines on mental health management of the elderly are increasingly available (Alexopoulos, 1996; Palmer, 1999; Burns et al., 2002; Baldwin et al., 2002,) The problems with guidelines implementation relate to the difficulties of diagnosis, the complexity of having actual social problems that need to be addressed, the patients' reluctance to accept antidepressants, the possible failures in the guidelines themselves in terms of their evidence base and relevance, and the need for involving multifaceted targeting of interventions (Callahan et al., 1996; Davis and Taylor-Vaisey, 1997; Kendrick, 2000; Croudace et al., 2003). There may be various ways of using guidelines. Clinicians may use guidelines not as a "gold standard" of decision making but as reminders of their own guidelines at the moment of care (Lobach and Hammond, 1997).

Although medical decision making is seldom based solely on "pure" evidence, use of the best available evidence is a challenge and an ethical obligation that needs to be addressed at all stages of medical education (Holm, 1998). The decision making by doctors and nurses may be influenced by knowledge and the nature of the problem but also by the context in which the health professionals confront problems (Gruppen et al., 1990; Lauri et al., 2001). In a Finnish study, nurses working in in-patient clinics and public health nurses with long experience applied decision making models that contained features of both systematic-analytical and holistic-interpretative approaches (Lauri and Salanterä, 1995). In an international comparison Lauri et al., (2001) found that nurses employed different decision making models in different situations using both analytical and intuitive cognitive processes. More information is still needed on the relationship between the nurse's knowledge base and decision making in different contexts.

The process of clinical reasoning requires a simultaneous assessment of information from a number of cues which have a weight expressing their relative importance. Together, the weights constitute the judgement policy. A judgement analysis model can be used to explain decision making (Denig et al., 2002). The doctor collects consciously or unconsciously a set of information which may include the symptoms and signs of the patient and their expressed concern regarding expectations of alternative treatments, previous treatment of the patient and possible co-morbidity ("patient's agenda") as well as some non-medical cues such as the patient's age or personality (Fisch et al., 1981; Denig et al., 2002). The physician transforms patient problems into solvable problems by reducing the amount of possible actions just at his or her disposal (Berg, 1992).

The question of clinical reasoning ability may be more relevant than clinical reasoning skills. A key approach is providing the learner or group of learners with feedback rather than teaching a strategy (Brehmer, 1994; Denig et al., 2002; Schuwirth, 2002). A number of studies by educationalists have begun to throw light on the process by which clinical expertise accumulates. Reflecting case stories provides salient features and decision rules that construct clinical working knowledge and best practice (Cox, 2001). "We start by learning *rules* about the cause, course and treatment of clinical conditions. As we gain knowledge we convert these rules to stereotypical stories (scripts). The knowledge is then refined by alternative stories via experience and the oral tradition. Atypical and alternative stories accumulate. Stories provide a framework for "net" thinking that links all the objective and subjective details within the multifaceted complexity of case management. There is growing evidence that clinical knowledge is stored in our memory as stories rather than as structured collections of abstract facts" (Greenhalg, 2002).

An adequate management of a clinical condition such as depression is not an automatic consequence of recognition of depressive symptoms. For treatment of depression to be initiated, both the physician and patient must agree that the symptoms warrant treatment and that the treatment is effective, practical and available (Callahan et al., 1996; Banerjee and Dickinson, 1997). Evidence based health care should be accompanied by evidence based patient choice, defined as offering patients information about treatment alternatives, the benefits and harms of each, and offering them a key role in decision making (Holmes-Rovner et al., 2001). Deber et al.(1996) suggest that the role of clinicians may be assisting patients in problem-solving to structure choices and supporting them in decision making. The importance of paying attention to each patient's preferences in partnership and decision making (Middelton and McKinley, 2000) has been emphasized.

The views and "voices" of service users and their family members or other significant others should be brought into decision making procedures, and services could be better modified on the basis of such views (Korkeila et al., 1998; Engeström, 1999b). Paying attention to communication strategies can influence the course of a clinical consultation (Malterud and Hollnagel, 1998). When patient's and doctor's agendas meet, the salutogenic perspective on the consultation allows the integration of doctor's "objective" and patient's "subjective" matters. An illustration of a modified tentative model of clinical decision making is presented in Fig. 1.

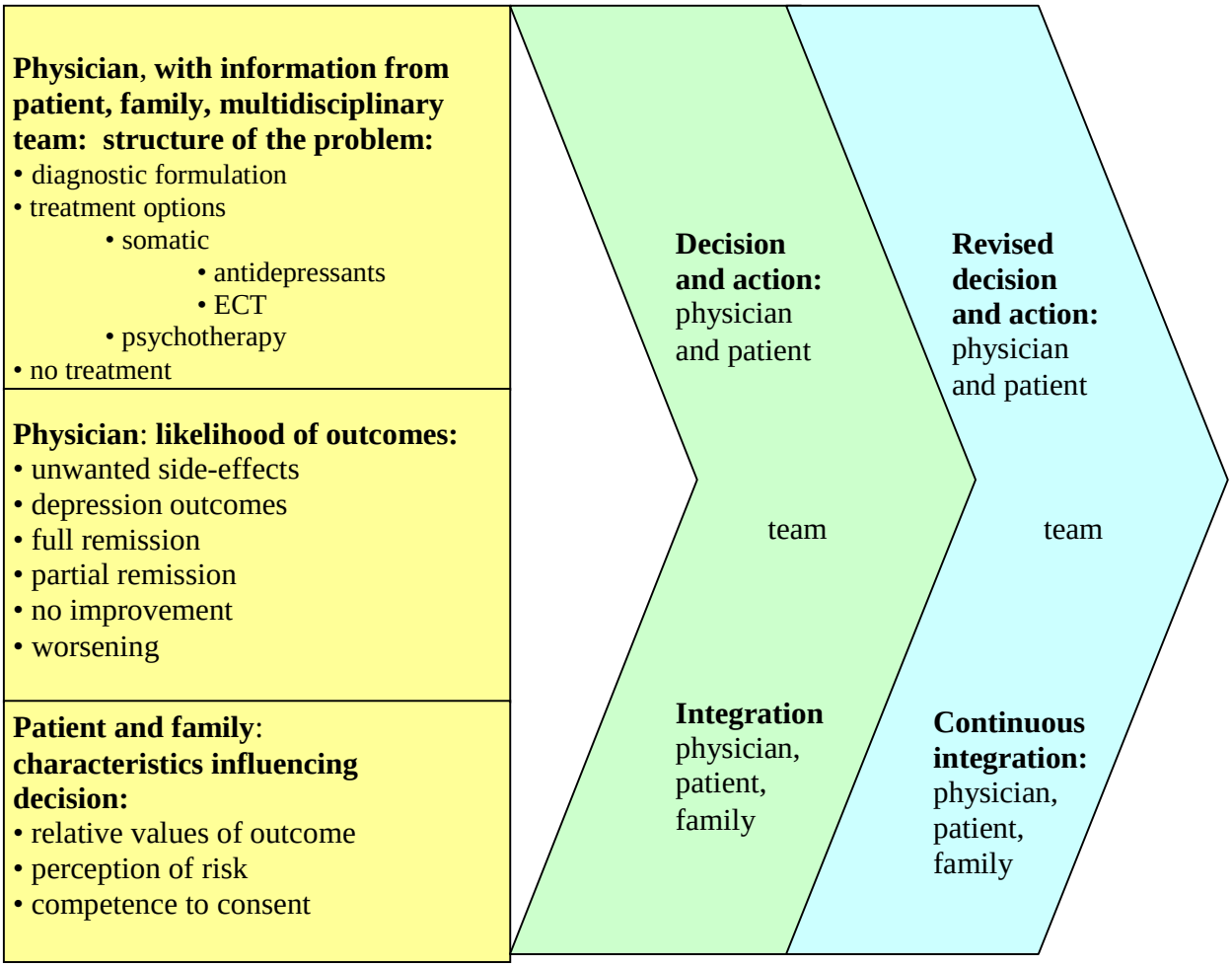

Fig. 1. A tentative model for decision making for physicians and multiprofessional team regarding treatment of depression. Modified after Wisner et al., 2000.

4 Aims of the study

The general aim of the present study was to investigate continuing professional education methods suitable for primary care professionals in geriatric mental disorders.

The specific aims of the study were:

Study I: to explore the present knowledge of geriatric psychiatry among primary care physicians, nurses and social workers and compare it with that of psychiatry residents and nurses.

Study II: to explore the attitudes of the same groups toward the elderly.

Study III: to evaluate the effects of a two different training courses for the same groups.

Study IV: to explore the clinical reasoning and management process in groups of primary care physicians and psychiatrist.

5 Subjects and methods

5.1 Health care in the city of Helsinki

The participants of this study were public health and social work professionals in Helsinki. Helsinki, with a population of half a million, has been geographically divided into seven main districts and further into 33 subdistricts. Each main district has a health centre which is responsible for providing health care services to the inhabitants of the districts (www.hel.fi/tervv). Each health centre includes several local health centres, dental clinics, psychiatric outpatient departments (also previously known as mental health offices) and a health centre hospital.

Each health centre physician is part of a team that is responsible for providing medical services to the inhabitants of a geographically defined area. At local health centres, the personnel are responsible for meeting the basic health care needs of the people in the district. The first point of contact for people in need of mental health care is the local health centre, from where they can be referred to specialized psychiatric services (local psychiatric outpatient or hospital units) when needed. The unit for geriatric psychiatry serving the elderly population in Helsinki is located at the Helsinki University Central Hospital (Helsinki and Uusimaa Hospital District, HUS) Department of Psychiatry. The Geriatric Psychiatry service comprises an outpatient unit and two acute assessment wards with 39 beds (www.hus.fi).

In this study the local health centres are referred to as "health centres" and psychiatric outpatient departments as "mental health centres".

5.2 Subjects and design of studies I, II and III

The subjects were 53 physicians, nurses and social workers participating in a 5 x 2h psychogeriatrics course arranged by the education section of the Helsinki City Department of Health. Two training groups were formed by inviting physicians and nurses from the local health centres of two main health districts (eastern and central) to participate in a geriatric psychiatry training course. The invitation was extended to social workers affiliated with local health centres.

Group 1 (N=27) was a mixed professionals' case-group discussing their own pre-prepared patient cases with the help of trainers. The group format in group 1 encouraged sharing of experiences and discussion of alternative treatment approaches. Group 2 (N=26), also a mixed professionals' group, heard a series of lectures on essentials of geriatric psychiatry, the topics being psychiatric and geriatric assessment, depression, dementia, anxiety, sleeping problems, paranoid states and family issues. The participants in the lecture group (group 2) could comment on the themes presented and ask questions. The participants were not informed about the two different training methods in advance. To explore the possible differences due to different teaching methods, comparisons were made between the study groups. The trainers, a geriatric psychiatrist, a geriatric psychiatry resident, an internist and a nurse specialist in psychiatry, were the educators responsible for both groups.

The participants entering the intervention were originally placed into training groups in turns, although ensuring that health centre team-members were placed in the same training group. The original plan for randomization did not work out completely because several participants preferred to change the given course time with better suiting dates. Team members, however, stayed in the same training group.

Evaluations were made on participants' psychogeriatric knowledge levels and reported attitudes towards old age care before and after training. The participants' experienced effects of the education were explored by semistructured interview. No direct assessment of patient outcome was included in the study.

A control group of 31 primary health care doctors and nurses from the north-eastern main health district was included in the study. Their participation was motivated by promising them a training course in psychogeriatrics later. The intention was to compare their knowledge and attitudes to those of course participants and so clarify the effect of the training. Two reference groups included in the study comprised 21 psychiatry residents and 23 nurses specializing in psychiatry; these reference groups were not offered training interventions.

5.3 Subjects and design of study IV

In Study IV the management plans by primary care doctors and psychiatrists for case vignettes representing geriatric depression were explored in detail. The participants comprised 25 primary care physicians of five health centres and 11 psychiatrists of two mental health centres. As in studies I, II and III, the setting was the public health care system in Helsinki. Two main health districts (Southern and Central) were invited to participate in this study. Each participating local health/mental centre hosted a geriatric psychiatry training event for its staff. A total of seven group sessions formed the basis for data collection. Participants were informed about the ongoing research on each occasion. In small group training sessions, the trainees were presented with two case vignettes representing different aspects of old age depression. At the beginning of the session, the doctors were asked to write down a suitable management plan for each case vignette patient. After these had been completed, they discussed the management of the two patients while the researcher acted as a moderator.

5.4 Material and methods used in studies I, II and III

A background questionnaire covering previous psychogeriatric education, work experience and expectations about this training was presented before the training started. The data collected by the questionnaire were assessed as group mean comparisons using Student's t-test and MedStat chi-square -test.

Psychogeriatric knowledge (Study I) was measured by a test developed from a test originally created by Sheikh and Yesavage (1985a; 1985b; 1985c) as it was considered to be a useful assessment device for different training approaches (Sheikh et al., 1988). A pilot study indicated that the original Sheikh-Yesavage geriatric psychiatry test was too difficult for multiprofessional groups. By combining and modifying original items, 40- and 50-item multiple-choice-question Finnish versions were created, the latter including three questions dealing with detection of depression and anxiety. Five knowledge categories were determined: psychopharmacology, clinical syndromes, assessment, old age and psychotherapy. The training groups were presented with the 40-item knowledge test before the training and the 50-item version 9 months after training. The control group was tested exactly like the

training groups. The reference groups were presented with the 40-item test once. Answers were given anonymously, with only group and profession recognizable.

In psychogeriatric knowledge study the group comparisons were made by using a pairwise t-test (BMPD 7D). In connection with Bonferroni significance levels, a single comparison must have a p-value less than 0.001786 to be significant at the 0.5 level.

In attitude study (Study II) attitudes were measured by a questionnaire created by Snape (1986). The scale is a Likert-type questionnaire with 30 items in five categories: geriatric nursing as a career, nursing skill, medical management, the multidisciplinary approach and attitude toward old age. A visual analogy scale was chosen, such as those used in attitude and behaviour assessment (Viukari et al., 1979; Morrison, 1983).The visual analogy scale values were measured and reversed when needed in order to have high values in all cases referring to a positive attitude. The respondents marked their own opinions on a 10-cm line scale for each item. Sum variables were determined according to the categories of Snape. The low internal consistency in the category "attitude toward old age" (Cronbach alpha SPSS-X VAX) led to the elimination of this dimension. Attitude differences and attitude changes after the training were explored by comparing group means (BMPD7D, t-test and analysis of variance.

Three additional statements concerning professional attitudes were presented: "I agree that doctors like to care for the elderly", "I agree that nurses like to care for the elderly", "I agree that social workers like to care for the elderly". As in the knowledge study, the study groups 1 and 2, the control group and the reference groups were presented with the attitude questionnaire. Nine months after the psychogeriatrics course the training groups 1 and 2 and the control groups received the attitude questionnaire by mail. The attitude questionnaire was completed anonymously and the participants were identified only by group and profession.

In the training evaluation study (Study III) the post-training interviews were carried 2-3 months after completion of the training by one of the trainers and a nurse specialist trained in interviewing. The semistructured (focused) interview utilizes open-ended questions which allow the subjects to express their own observations and comments on preselected themes, such as "How do you assess this

multidisciplinary training from the perspective of your own profession?" All the interviews were audiotaped.

The evaluation study utilized a qualitative approach. The written transcripts of the interview material were studied by phenomenographic analysis, which has been used in evaluating effectiveness of education (Larsson, 1986). The phenomenographic analysis focuses on the conceptions and ideas expressed by the subjects on the clearly defined topic, and studies the possible identifiable differences among the conceptions expressed. Variations in responses are characterized and content categories are formed to explain the phenomen studied (Marton, 1981; Dahlgren, 1984). The answers given to the questions in the semistructured interview were also coded quantitatively for the use of the MedStat chi-square test in between-group comparisons.

5.5 Material and method used in study IV

A qualitative multimethod approach utilizing content analysis of individual written responses and focus group discussion analysis was chosen as the framework of the study (Patton, 1990). The focus group method has been used for data gathering in health sciences and is suggested to be particularly useful for exploring participants' knowledge and experiences on a pre-determined topic (Kitzinger, 1995; Morgan, 1997). Focus groups rely on group interaction and are considered to be suitable to examining how knowledge and ideas develop and operate within a given context (Kitzinger, 1995; Morgan, 1997).

The data collected for the study comprised individually formulated treatment suggestions by all participants (in written form) created for the presented case vignettes representing old age depression, field notes made by the researcher to record the group discussions and four videotaped sessions and their transcripts. All of the groups were asked for their permission to videotape their session. Four of the five primary groups and one of the two psychiatry groups assented. Videotaping of the psychiatry session failed for technical reasons.

Case-vignettes have been used in postal questionnaires in studies exploring expressed treatment preferences on clinical issues (Orrel et al., 1995; Butler et al., 2000; Rothera et al., 2002) and they

have been previously used in comparing decision making strategies of different groups (Rosenquist et al., 2000).

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The individually formulated management plans were first examined by the researcher and a geriatric psychiatrist independently to identify essential features of the plans and possible differences in management strategies. The management suggestions presented in individual responses were coded quantitatively to help in recognizing the prevailing as well as more uncommon treatment options. The content analysis of these data allowed the formation of treatment categories based on patterns of management. In the second part of the analysis, the field notes of the group discussions were studied qualitatively by the researcher and a geriatric psychiatrist independently, and the videos and their transcripts by both authors of the study IV. The individually formulated management plans (in written form) and the recording of focus group discussions were examined in the second phase of the analysis.

The qualitative analysis of the doctors' management approaches followed the principles of grounded theory (Strauss and Corbin, 1991). Although the data were gathered from two different professional groups, the study did not present any pre-formed hypothetical claims about the different strategies to be found. Instead, the analysis was sensitive to and looked for possible differences in the data. The findings regarding differences in reasoning were integrated into conceptually constructed understandings or themes. The interpretative processes started from data level (repeated readings of data) and continued to conceptual levels.

6 Results

6.1 Studies I , II and III

The participant analysis indicated that the training groups were homogenous with the exception of professional distribution: the number of physicians was greater in group 1 (10) than in group 2 (4). There was no significant difference in mean age (37.5 years, SD 1.3 for all participants) between the groups, and neither in mean number of elderly patients seen weekly, expectations towards the training or number of announced previous training experiences (MedStat). In the post-training evaluation 84% of the participants were interviewed. Nine months after the training intervention, 15 subjects from group 1 and 12 subjects from group 2 were reached for re-evaluation (knowledge and attitude questionnaires). Professional distribution and mean years of work experience of study groups are presented in table 6.

Table 6. Distribution of professions and mean professional experience in group 1 ("case"-group) and group 2 ("lecture" group) of multiprofessional psychogeriatric training intervention

Group	*Professional distribution Doctors/nurses/ social workers*	*Mean years of work experience*
Group 1 "case" Pre-training response N= 27	10/ 15/ 2	9.2 (SD 10.2)
Group 1 "case" Post-training response N= 15	7/8/0	
Group 2 "lecture" N= 26	4/ 18/ 4	8.6 (SD 7.7)
Group 2 "lecture" Post-training response N= 12	1/8/3	

Investigation of issues concerning omissions of participants showed no reason for suspecting systematic bias of the results. Rapid turnover of staff was understood to be one of main factors contributing to

lower rate of responses. Only 20% of the 31 control group subjects participated in the post-intervention part of the study, and the control group was eliminated from the post-test analyses.

6.1.1 Results of Study I, Knowledge study

The results from the knowledge test for the five sum variables in the groups tested are presented in Figures 2-6.

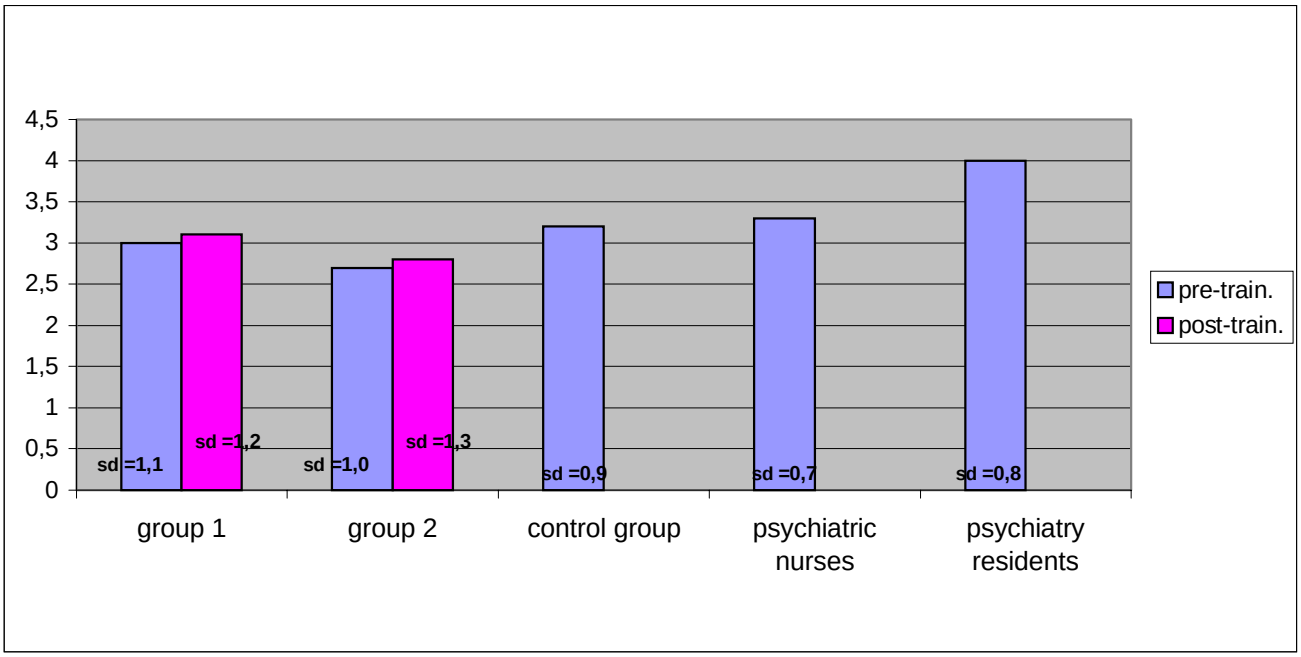

Fig 2. Group means in sum variable ”Psychopharmacology”

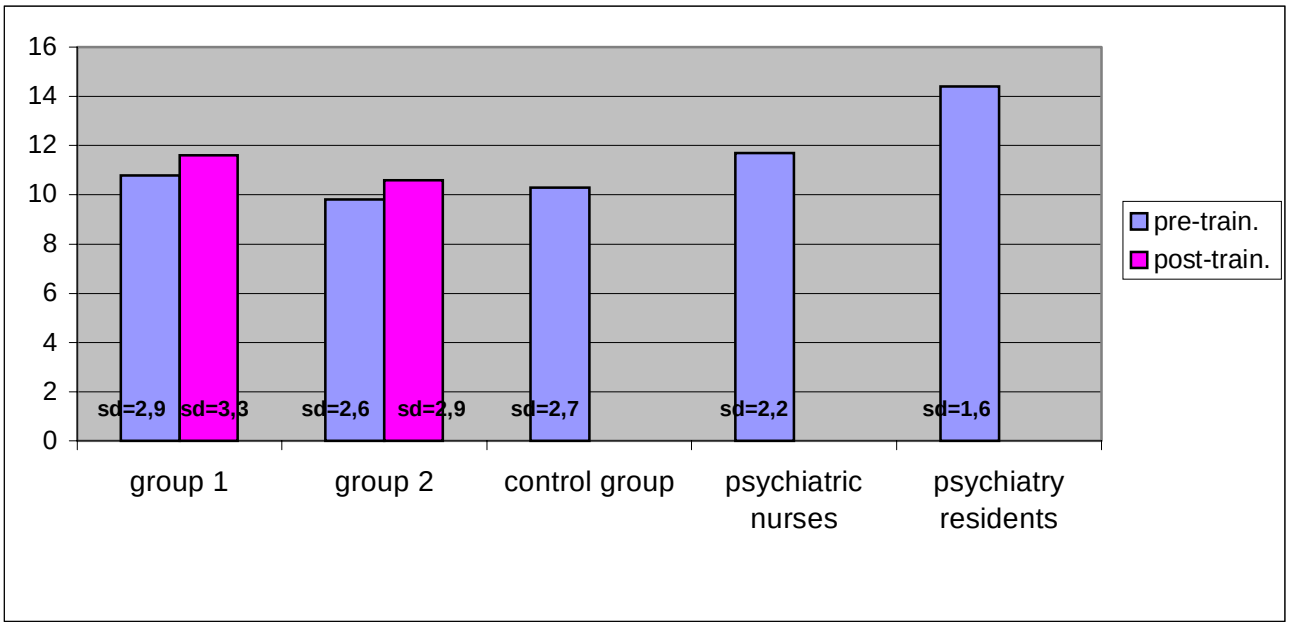

Fig 3. Group means in sum variable ”Clinical syndromes”

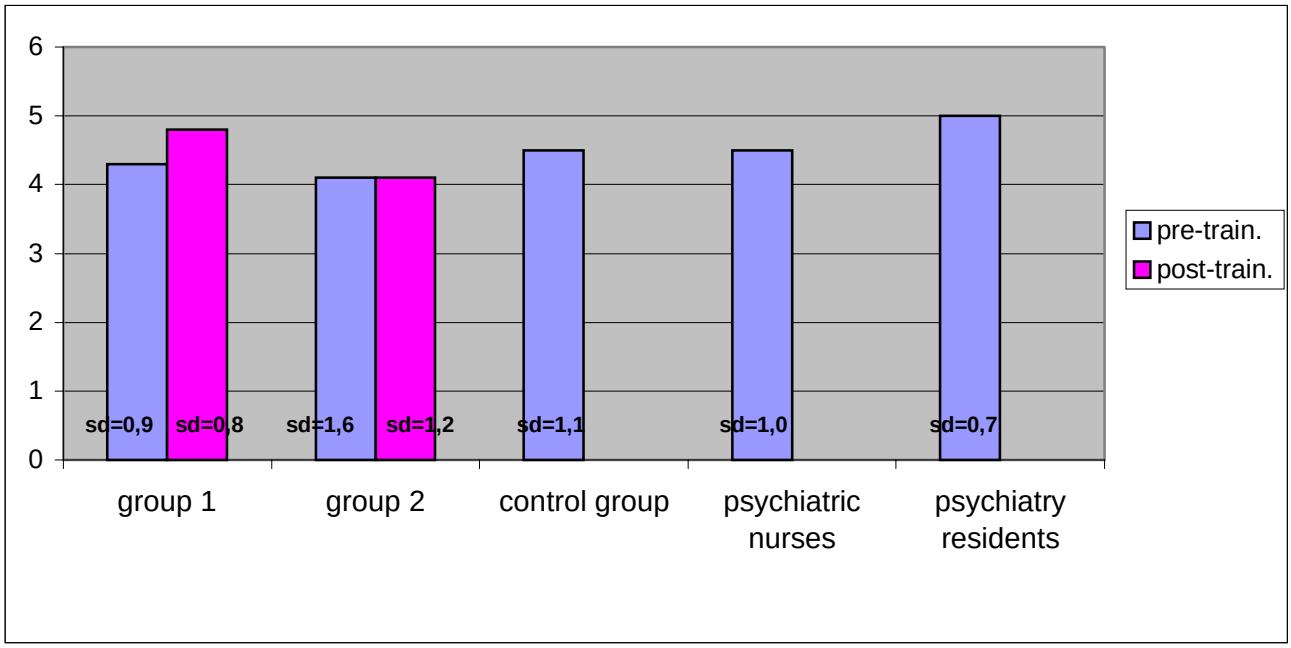

Fig 4. Group means in sum variable ”Assessment”

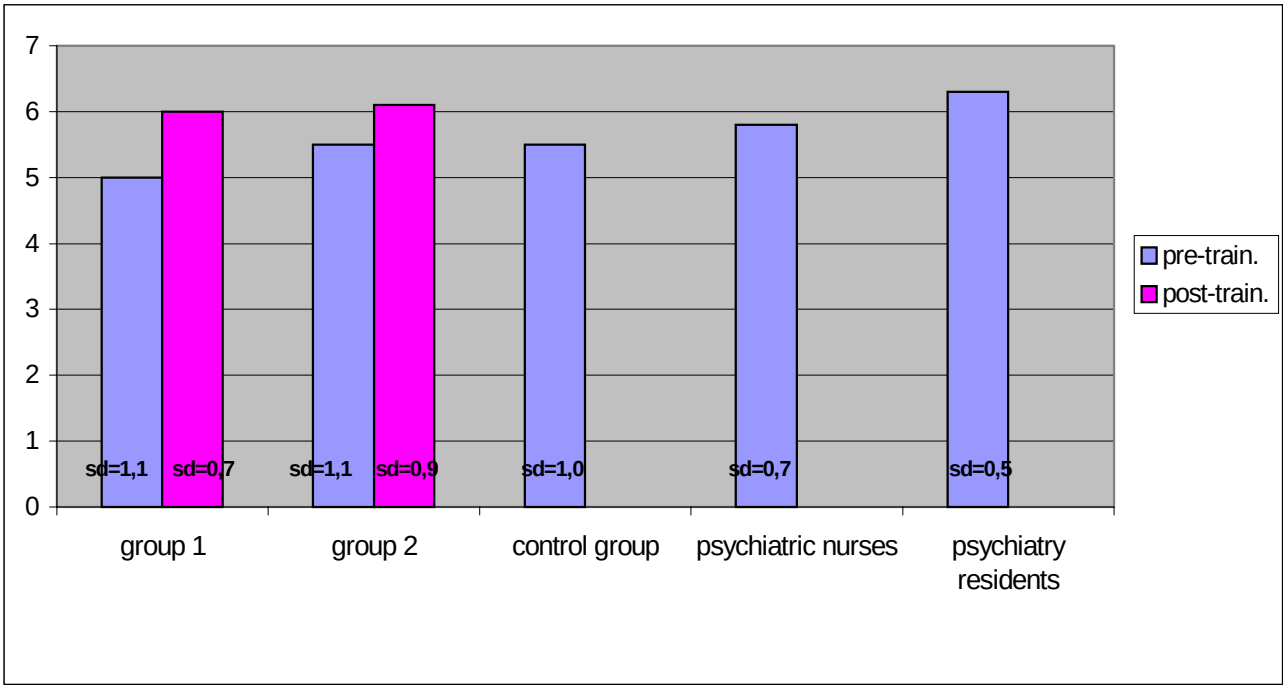

Fig 5. Group means in sum variable ”Old age”

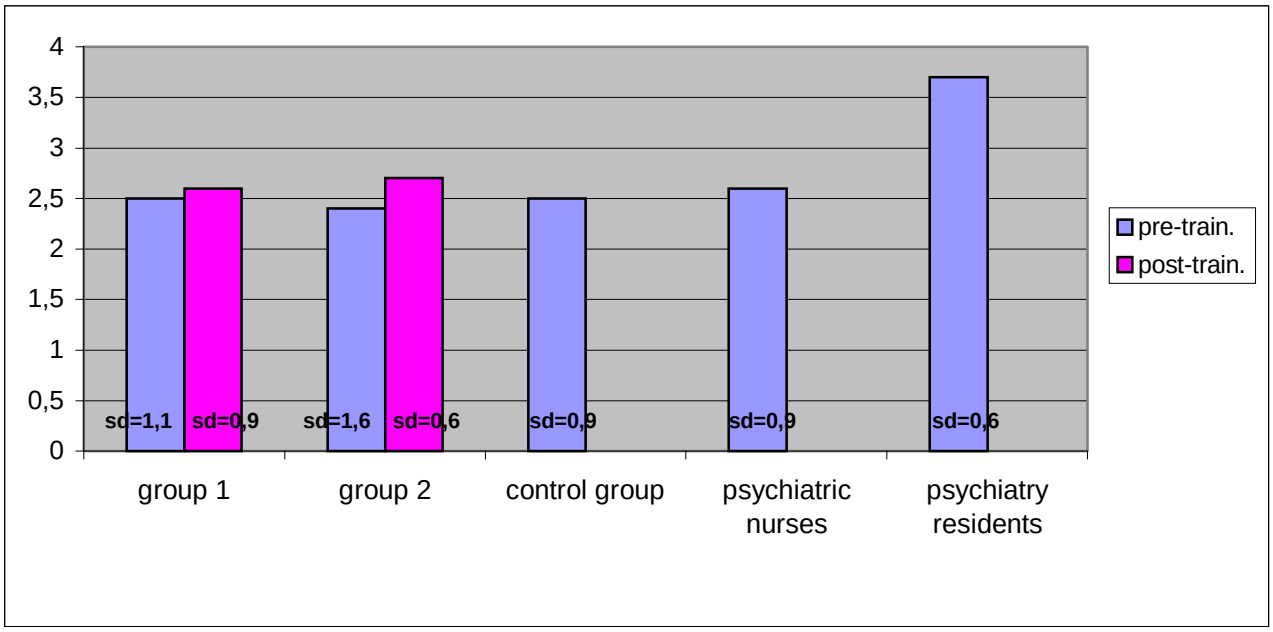

Fig 6. Group means in sum variable ”Psychotherapy”

The results from the psychogeriatric knowledge test for the sum variable "psychopharmacology" (Fig.2) which included 5 items, showed that the group means of the training groups did not differ significantly in pre- or post-training evaluations. The psychiatry residents had the highest scores, which differed statistically significantly from the pre-training means for group 1 (5%), group 2 (0.1%) and control group (5%).

In the area of "clinical syndromes" (17 variables, Fig. 3) there was no statistically significant difference in the pre- or post-training evaluation between the training groups. The psychiatry residents, however, again had the highest mean, which differed significantly from the pre-training means for all the primary health professionals' groups and from the mean for psychiatric nurses (0.1%). The post-training assessment showed no significant difference remaining between the psychiatry residents and the case group (group 1).

In the category "assessment" (6 items, Fig. 4), the training groups did not differ significantly from each other before or after training. The psychiatry residents' group had the highest score but in comparisons their results did not differ significantly from those of other groups.

The sum variable "old age" included 7 psychosocial questions (Fig. 5). Both training groups showed more knowledge after the training, but the change was not significant. The significant difference (5%) between the psychiatry residents and the case group (group 1) before training disappeared after the training.

The category "psychotherapy" comprised 4 items (Fig. 6). The group mean of the psychiatry residents differed significantly from the pre-training means of both training groups (0.1%), the control group (5%) and the psychiatric nurses (0.1%) and the post-training (5% and 1% for groups 1 and 2).

Investigation of the 10 additional questions showed no significant differences between the training groups.

6.1.2 Results of Study II, Attitude study

In the attitude study the training groups were nearly identical in their attitude expressions. One of the reference groups, the group of nurses specializing in psychiatry, had the highest scores in all sum categories created except "medical management".

In Snape's attitude category "career," both training groups showed a tendency towards more positive attitudes, but there was no statistical significance between the group means. The reference group of nurses specializing in psychiatry had the highest mean and the group of psychiatry residents the lowest.

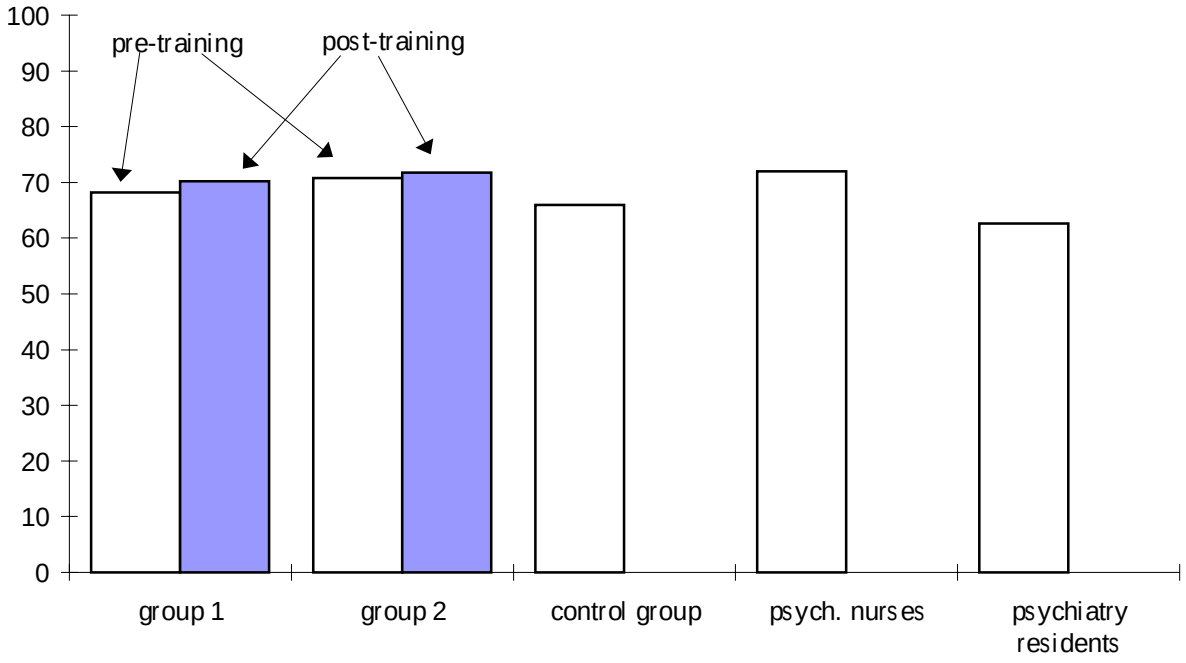

Fig . 7. Group means in sum variable ”Career”

In the category "nursing" there were no significant differences between the training groups. No modification of attitudes could be shown as a result of the training program. The group of psychiatric nurses had again the most positive attitude.

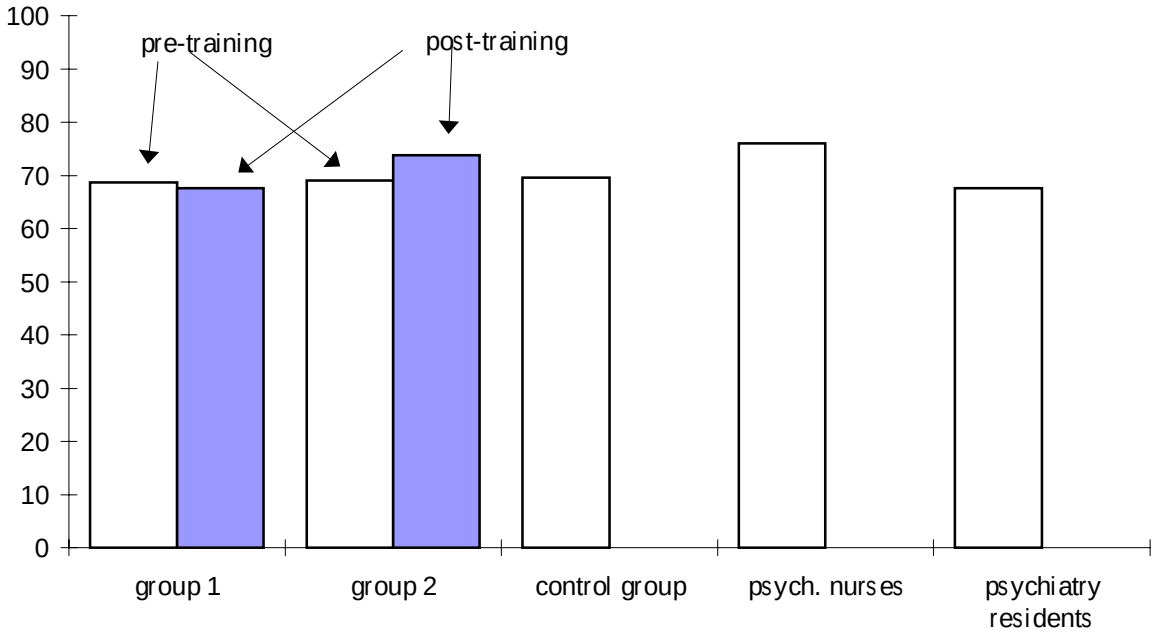

Fig. 8. Group means in sum variable "Nursing".

Almost the same results were obtained in the attitude category "multidisciplinary approach". The group of future nurse specialists had the highest score. The means were statistically significantly different between the nurses and training group 1 (case group) before training (p. 0.0002). Both case group and lecture group attitudes became more positive, but the change was not significant

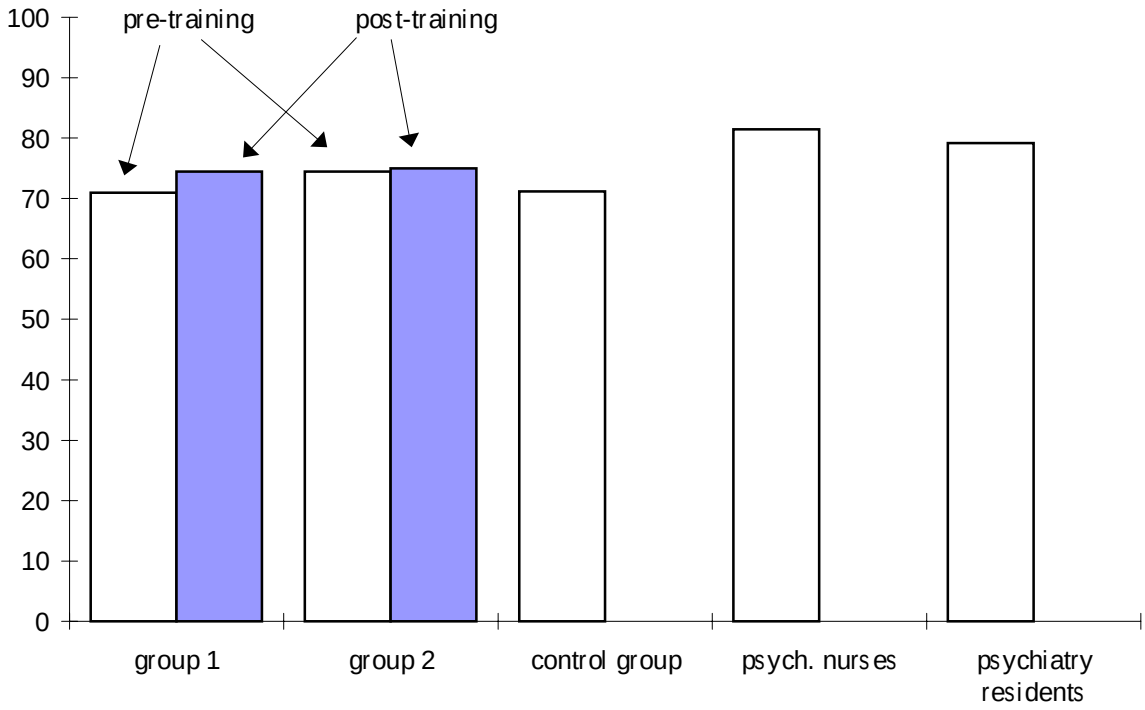

Fig. 9. Group means in sum variable "Multidisciplinary approach"

In the attitude category "Medical management" there were no significant means differences between the study groups. The reference group of the future psychiatrists had the highest mean, (89) with the psychiatric nurses showing attitudes almost as positive.

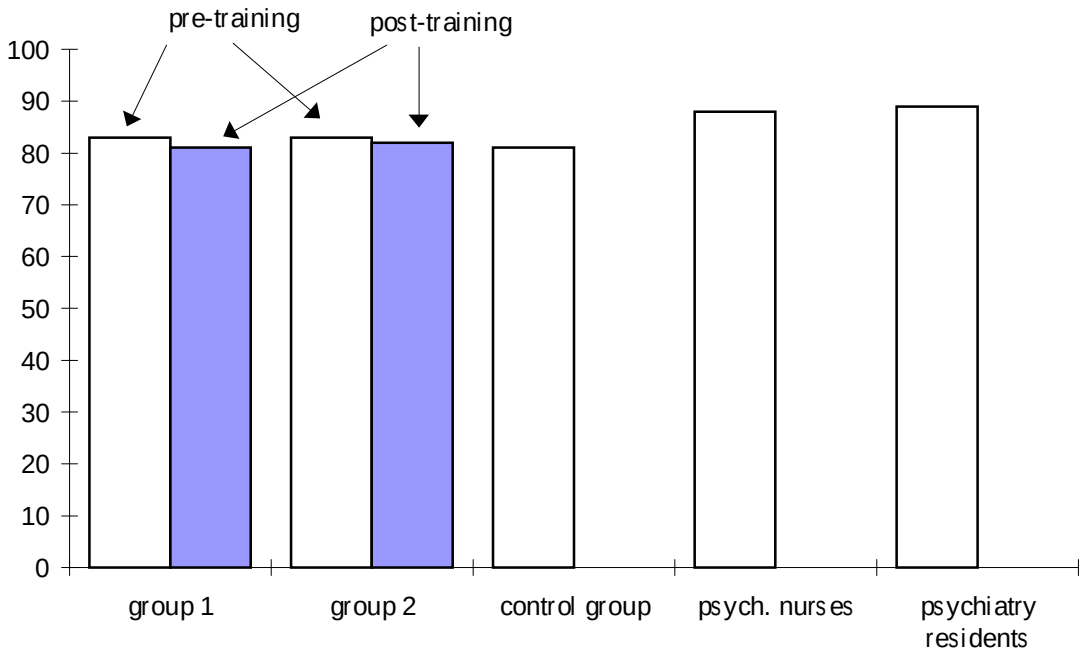

Fig. 10. Group means in sum variable "Medical management"

The analysis of the additional statements indicated that the groups regarded physicians as having the least interest in care of the elderly, while social workers were the ones described with the greatest willingness for old age care. The difference was also statistically significant.

The investigation using covariance analysis with the subject's profession as the covariant (BMDP7D) indicated no significant differences between the group means. Doctors felt that the willingness of their profession to care for elderly patients was not very great (group mean for doctors 36.0, SD 16.5, N= 50), nurses and social workers were more positive: mean 44.0, SD 25.2, N= 94 and mean 43.0, SD 19.9 N = 11 and p. 0.12.

Doctors responded to the statement "nurses like to take care of the elderly" more positively, their group mean being 41.6 (SD 17.9). Nurses were even more positive about themselves (group mean 48.1, SD 20.6) and more than social workers (mean 46.3, SD 22.4). The difference was, however, not significant (p. 0.18).

Doctors in this study agreed that the social workers were the most willing to care for the elderly: group mean 46.8, SD 14.9. The nurses and social workers had a higher score of 53.5 (SD 18.2 and 31.0). The analysis of variance tail probability value was 0.10.

6.1.3 Results of Study III, Evaluation study

In the evaluation study the main focus was to explore the self-perceived effect of training on the participant's daily work. Sixteen per cent of the trainees could not be contacted for the post-training interview but there was no difference between groups.

In the semistructrured interview data the comparison of the answers showed no significant difference between the groups (MedStat). In both study groups half of the subjects irrespective, of profession stated that training had influenced their manner of working.

In each group two subjects (in the case group a physician and a nurse, in the lecture group a physician and a social worker) announced that they had not benefited from the training. Those finding the course useful mentioned that it inspired more personal freedom in working and more symptom tolerance, while encouraging more active use of knowledge. The participants stated that most useful was learning to utilize one's knowledge in a more creative and confident manner. This was reflected in the more natural patient contacts and greater professional confidence reported by 48 % of the subjects. Almost 20 % reported acquiring new knowledge. There were no differences between the groups.

The phenomenographic analysis was used to generate alternative explanations for the experienced usefulness of training, relating it to the knowledge utilization or augmentation process. The results reflect self-reported changes. Direct patient outcome variables were not included in the evaluation.

The pattern of answers to the question "Is it useful to have multidisciplinary training?" was similar in both groups. Most of the subjects (70%) found the multidisciplinary training useful. The nurses and social workers earned appreciation from the doctors as co-trainees, while many nurses felt the multi-

disciplinary training was natural because "we work together every day". Those having a critical attitude brought up communication problems and domination by those in medicine.

Table 7. Formulations created to explain the experienced effectiveness of training

The effectiveness (usefulness) of the training is related to the knowledge utilization process.
The effectiveness is related to the psychogeriatric knowledge augmentation process.
In multidisciplinary training the participants need to work out their professional roles and manner of working.
Multidisciplinary training is too comprehensive and breaks down professional communication.

6.2 Results of Study IV

The data allowed the essential treatment preferences of the two professional groups to be distinguished. The disparities that emerged were grouped under three themes based on different aspects of clinical reasoning. The first concerned the specificity and number of suggestions shaping treatment strategies. The second was an assessment of the stage of depression. The third was connected to the different lines of contextual thinking.

The primary care doctors tended to opt for counselling, social support and various activities (e.g. social clubs) as means of treatment, while the psychiatrists favoured intensive supportive contact and therapeutic discussions. In their written contributions, primary care physicians often expressed general

treatment ideas such as "start an antidepressant" or "make sure social support is available", whereas psychiatrists stipulated a specific antidepressant, often with a starting dose, and suggested forms of supportive therapy suitable for the patient.

Almost all of the psychiatrists saw an immediate treatment need for both vignette patients, whereas many of the primary care doctors tended to view the situation less urgent. The psychiatrists were not hesitant to launch a treatment schema for major depression, with intense therapy sessions and medication. The primary care physicians, by contrast, were more likely to "keep an eye" on the depressive symptoms and less likely to apply a comprehensive treatment schema or refer the patient to psychiatry services. The disparities were seen with both vignette patients.

The reasoning behind decisions to counsel or refer the patient readily emerged in group sessions. When discussing secondary care referral, the primary care physicians were not very eager to suggest immediate psychiatric consultation or referral to psychiatric care. They either saw no need for this step and presumed the patient’s reluctance to see a psychiatrist, or were not aware of the availability of local psychiatric services.

The primary care groups expressed interest in the case patients' general well-being and brought up similar cases from their practices in group discussion. The psychiatrists were eager to deepen their understanding of the case patients' personal coping systems (especially when encountering losses) and personal past and remaining social relations. They also wanted to know more about actual stressful events. In all group sessions, the treatment schemata were enriched by asking questions about missing information.

Table 8. Treatment preferences emerging as themes based on different aspects of clinical reasoning

1. Both professional groups seemed to highlight somatic assessment and the need to address co-existing physical problems. A difference was found in the *specificity* and *number* of presented psychosocial and psychopharmacological treatment ideas between the primary care and psychiatry groups.
2. Assessment of *the stage* of old age depression differed between primary care physicians and psychiatrists.
3. The primary care physicians tended to rely on *their previous experience of similar cases* and to emphasize the establishment of a good counselling relationship, while the psychiatrists were more active in asking about *the patient's personal situation* when forming the management plan.

7 Discussion

7.1 Study design

All training interventions of the study were conducted in an authentic environment. The invitation to a geriatric psychiatry training course was extended to two main health districts and their local health centre teams. The details about the trainees' or their managers' decision to participate in the event were not revealed, and may reflect the usual practice prevailing in health centres. The training intervention included in studies I, II and III called for the participation of health centre doctor-nurse -social worker -teams. In study IV, five out of the seven local health centres and both mental health centres that were offered the training event agreed to participate. The fact that the training took place at the health centres allowed full participation of physicians and psychiatrists, even though occasionally a doctor had to step aside for an urgent task.

There was an extreme shortage of health personnel and a great turnover of staff at the time of studies I, II and III which may partially explain the low rate of the questionnaire response post-intervention part of the study (55% participating from group 1, 46% from group 2). It may also explain the disappearance of control group. No bias of results was suspected between the groups as there were omissions in both groups. The response rate was high enough to allow the group comparisons. Multidisciplinary training studies have reported varying, and even lower completion rates (O'Boyle et al., 1995; Standart et al., 1997).

The first training interventions were multidisciplinary. In study four there were educational groups arranged for one profession at a time. The design in studies I-III allowed the comparison of two different teaching methods. The randomization of participants into teaching groups was only partially successful because of some participants' individual time schedules.

In studies I and II knowledge in geriatric psychiatry and attitudes toward care of the elderly were surveyed anonymously, subjects being identified only by group and profession. Anonymity was chosen to support attendance in the test phase since it has not been the usual practice to present established

health -care professionals with formal test of knowledge or to inquire about their attitudes. It is worth noting that in study IV one of the health centre groups and one psychiatry group did not accept videotaping of their group session. Anonymity may, however, lose its importance in evaluation because skills and performance assessment is coming more commonplace among the new professionals (Epstein and Hundert, 2002).

Study IV utilized written preprepared case-vignettes. The use of "paper-patients" made it possible for several doctors simultaneously to make clinical assessments based on the same medical data. The participants could also compare their clinical reasoning with others'. The case vignettes often prompted associations with the participants' own patients.

7.2 The methodology applied and its appropriateness

The methodology employed in this study reflects the tradition of evaluating educational interventions. It started with traditional student - or more precisely - with a trainee group -oriented approach measuring the level and delivery of psychogeriatric knowledge. A less conventional problem based - approach was, however, applied already in the training format of group 1 in studies I - III. Study IV examined the process of clinical reasoning and introduced a more adult learning type of training context. It also allowed the utilization of peer group contributions.

Studies I-III explored participant satisfaction, possible changes in knowledge and attitudes and self - assessed changes in performance. A structural evaluation measure, the attendance in training events was very high. In studies I and II questionnaires were used as evaluation tools. The model of the pre-post-training testing (knowledge questionnaire, attitude questionnaire) has been used in similar studies. The pre- and post-test questionnaire employed to investigate psychogeriatric knowledge is internationally known, as is the attitude scale employed. The knowledge test chosen allowed a participant achievement evaluation. One of the challenges with multidisciplinary education is to tailor the content according to the participants' pre-existing knowledge (Richardson et al., 2002), a challenge that could not be met in this study. A semistructured interview used as an evaluation-tool (study III)

was considered adequate for collecting data on the educational experience and its self-perceived influence on participants' professional behaviour.

The analysis of focus-group discussions along with individually prepared management plans provided a new approach and an opportunity to look more closely and deeply into clinical decision making. In the qualitative analysis of study III the interviews were carried out by trained interviewers and audiotaped. In study IV recording of one the group sessions was unsuccessful due to a technical failure. Writing notes at the time of group interaction could interfere with the process and cause some details to be missed (Britten, 1995). The several ways used to collect data may have alleviated this problem.

The generalizability of the results of quantitative studies I and II is limited by the rather small amount of participants and the only partial randomization of subjects to training groups. On the other hand, the participating groups can be presumed to represent the population studied. The loss of the control group weakens the power of the study. The generalizability of the results in qualitative studies III and IV is connected to the accuracy with which the subjective meanings and social context of those being researched is described (Fossey et al., 2002; Morse, 1999). All participants were purposefully selected for the contribution they could make to the construction of understanding the phenomenon studied.

7.3 Effectiveness of training intervention

7.3.1 Knowledge

Study I explored the knowledge domain. It showed that the group performances were improved on all sum variables but one (group 2 ,"lecture" group, on "assessment") but the change was not statistically significant. The comparison of the psychiatry residents and the test groups showed that the significant pre-training difference on item "clinical syndromes" and "old age" disappeared in post-training comparisons between the psychiatrists and the case-group. Our finding is in accordance with O'Boyle et al (1995), who found a decrease in the pre-test scores comparison between the professions after a training event. On the other hand, in these sum variables the test scores were relatively low as

compared to other sum variables. The originally higher scores on other sum variables may have levelled out the results, as reported in the use of a knowledge test by Smith et al. (1994). The knowledge level homogeneity of the training groups may also have affected the results and probably partially explains the small post-training changes, as in earlier studies (Gask et al., 1988; Sriram et al., 1990).

The groups compared in the knowledge study were very homogenous with the exception of the greater number of physicians in group 1 ("case"-group). Somewhat surprisingly, this did not produce any significant difference between groups in the pre-training analysis of sum variables tested. The results of the knowledge level assessment as indicated by the instrument used showed that the psychiatry residents had the highest mean in all five categories and produced correct answers to 80-90% of the questions. The primary care groups had rather low scores on the sum variables "psychopharmacology" and "clinical syndromes", reaching nearly 60% accuracy, while doing somewhat better on "old age" and "assessment". The nurses specializing in psychiatry had the best results for "old age" (83% correct), but were closer to the performance of primary care groups for other sum variables. The results suggest a need for further training in various sectors of old age psychiatry. The nurse specialists in psychiatry are often called to work as primary care nurse consultants and need to have an adequate knowledge background. The knowledge level of the few social workers included in the study could not be reliably assessed because the instrument used was found to be too difficult and far too comprehensive for the social workers.

The Knowledge Assessment Test for Geriatric Psychiatry was developed with the expert consultation of several psychiatrists and psychologists. According to the authors the test should - with modifications - be useful to all mental health professionals working with the elderly (Sheikh and Yesavage, 1985a). The preliminary validation study on the ability of the test to document changes in knowledge of psychiatric residents before and after a course in geriatric psychiatry suggested that the test can be used as a device to assess the effectiveness of geriatric psychiatry training (Sheikh et al., 1988). However, due to the scarcity of data available, the potential of the test to detect differences between the pre- and the post-training knowledge scores for multiprofessional trainees is not well known. The test used might thus not be sensitive enough to show knowledge improvement.

In this study the use of two different training methods did not produce significant differences in tested knowledge between the groups in direct comparisons. Could the case-group method be more appropriate in training of complex issues such as "clinical syndromes" and "psychopharmacology"? The methods can also be attached to assessment of long-time effects of training, which was excluded from this study.

The case-group prepared their own case examples in advance for training meetings and the lecture group heard case examples presented by the trainers while group discussion was encouraged. It is possible that the active lecturing method (Nierenberg, 1998) has levelled the results and actually made the difference between the teaching formats smaller than intended.

In the training evaluation interview the participants tended to report more flexible and better integrated use of previous knowledge rather than the acquisition of new knowledge. This is accordance with Jordan et al. (1999a; Jordan et al., 1999b), who reported increased awareness and monitoring of the side-effects of medications in the professional behaviour of the participants after a specialist course in pharmacology. The accuracy of self-reported learning may be questioned. There may be some thresholds for self-reporting of increased knowledge because of the "painful experience of learning" (Persson, 1990). Learning new ways of working means giving up something old and familiar.

7.3.2 Attitudes

The training event did not have great impact on the attitudes of the participants. Attitudes were generally positive from the beginning which may explain the small effect, as was found by Smith et al., (1994). That the questionnaire was originally planned for nurses may partially explain the high mean scores obtained for nurses specializing in psychiatry. It is interesting that there were no significant differences between the training groups in study II, although there were more doctors in group 1. The small number of subjects included in group comparisons may offer a partial explanation.

The attitudes expressed toward different professionals' willingness to take care of the elderly were neither very positive nor very negative. The social workers may been seen as occupying a highly essential role in geriatric care. All the groups, especially the psychiatric residents, were rather

pessimistic about physicians' willingness to take care of the elderly, which accords with earlier studies (Ford and Sbordone 1980), although these perceptions may be changing in a more favourable direction (Colenda et al., 2002). No undergraduate nursing students were included in the study. Some other studies have indicated that nursing students may have less favourable feelings towards the aged and less positive attitudes toward multidisciplinary work (Söderhamn et al., 2001; Snape, 1986).

The participants in the evaluation study (Study III) described their learning experience as learning to see the work challenges from a different point of view with more options and choices available, also for their elderly patients. More symptom tolerance was reported. This may support the tendency to move from the traditional paternal attitude toward a more "adult - adult" type of professional - patient relationship as described by Salvage and Smith (2000). Moving from "paternalism to partnership" in decision making is not without problems when patients are frail elderly, because the latter may be used to and even prefer a paternalistic approach (Middleton and McKinley, 2000; Dunn, 2002). The doctor's knowledge of the patient is of outmost importance. The importance of attending to the personal multidimensional framework of interaction and decision making seemed to emerge in the evaluation of learning experience in this study.

7.3.3 Multidisciplinary approach

The multidisciplinary approach employed in the training interventions included in studies I, II and III emerged from the old age psychiatry educational tradition and was well accepted by the participant groups. Multidisciplinary training is not an inherited value and needs to be assessed in the same way as other continuing education approaches. Multiprofessional cooperation is lost and inadequacy felt if training is too demanding or without any connection to one's daily work.

In our study the majority (70%) of the participants felt that multiprofessional training was useful, with no difference between the groups. In the interviews the multidisciplinary approach was described as a natural way of learning as the participants were daily involved in the care of multiproblem patients. Irrational use of team work was apparently not a problem. The participants felt that it was important to clearly establish one’s professional identity and find a satisfactory professional role in order to benefit from multidisciplinary training. New models of collaboration emphasize that it is not what people have in common but their differences that make collaborative work more powerful than working separately.

The role of social services should not be underestimated in organizational and educational planning. In this study the willingness of social workers to care for the elderly was highly appreciated by the other professions. It has been emphasized that joint education and evaluation of services will be essential to ensure flexible and close cooperation of services for the benefit of patients and their carers (Williams, 1994). Whitford (2001) points out that in an adult learning process the learners control their learning environment, which can be described as a transactional process of collaboration, support, respect, freedom, critical reflection etc. This prepares them for introducing the same atmosphere into their work with older adults, which again may strenghten their clients' sense of controlling their environment. In this study the contribution of social workers in old age care was evaluated as very high.

7.3.4 Clinical decision making

This study recognized the institutional and resource related factors which may influence the treatment strategies available for physicians and psychiatrists. These may include the time limitation in primary care and the better psychotherapy resources in psychiatric secondary care. The focus of this study, however, was to look for a more developmentally and educationally oriented perspective with attention on the clinical traditions of the professions studied.

Not much is understood about the conceptual models used by primary care physicians in clinical decision making (Collings, 2001), whereas psychiatrists are known to have access to DSM manuals and classification systems. Neither of the case vignettes specified the nature of help the patient was after. The doctors in our study had the challenge of organizing the information the case-vignette patient provided. The group discussions made it possible to explore what the participants actually heard from the patient's story and how they made sense of it. The themes reported in study IV are considered a preliminary way of organizing "hearing" in the field of clinical reasoning.

The strategies shaped from the perspective of psychopharmacology have represented an established and reflective tradition in CME. In Finland, a considerable amount of training is available for doctors on the pharmacotherapy of depression, while training on psychotherapeutic applications for the elderly is seldom, if ever, offered to anyone other than psychiatrists. In study IV, data on previous training experiences of the participants were not collected, but training practices may contribute to the

similarities between the groups reported in antidepressant use, and the differences in the use of psychosocial treatment applications. This finding is in line with Ojala and Lehtinen (2001), who found that half of the studied physicians felt confident in recognizing mental health disorders, whereas only 20% of the primary care doctors felt they knew when psychotherapy would be beneficial and only 8% stated they would be capable of giving crisis therapy to their patients. Our finding also supports Winblad et al. (1995) who found a need of training for primary care doctors in psychopharmacology, psychotherapy, family approach and care system.

The results from study IV suggest that psychiatrists tend to see the phase of depression differently from primary care physicians, as they seem to pay more attention to the duration of symptoms. Being used to treating more serious clinical cases, psychiatrists may also be more familiar with the variability and fluctuations of psychiatric symptoms. Primary care physicians did not usually comment on the severity of the depression or connect it with functional breakdown. Our findings support earlier observations that primary care physicians are more used to treating chronic cases and are possibly unfamiliar with active interventions for new incidents (Marwijk et al., 1998). It may be more difficult to see new symptoms in a patient one has been treating for years. In this study the cues followed and considered to be relevant seemed to vary somewhat between the professional groups. Van Weel- Baumgarten et al. (2000) suggest that the focus in secondary care may be more on actual symptoms for which the patient has been referred than on previous complaints, history and context. In this study the psychiatrists, however, reported interest both on actual symptoms and the patient's life situation.

The patients themselves do not always worry about the duration of their symptoms because the time perspective may be distorted by the character of the disorder, as is often the case in serious mental problems. It is interesting to note, however, that none of the seven studied groups directly raised the treatment urgency issue for discussion. That the primary care physicians were more likely to "keep on eye" on depressive symptoms supports Watts et al., (2002) who suggest that primary care physicians' decisions to defer treatment or stay monitoring some patients indicates an awareness of spontaneous remission in at least some participants. The findings of study IV may be in accordance with Berg (1992) who suggests that time is a factor which can mould the transformation of patients' symptoms to a solvable problem: when time runs short during consulting appointment, potentially time-consuming cues are remoulded in favour of more time-saving ones. The formal diagnostic systems ICD- 10 and

DSM IV give the symptom endurance criteria of two weeks. However, the practice recommendations emphasize "how and what treatment is given"- not when it should be started (Baldwin et al, 2002). As understanding of the clinical presentation and course of geriatric depression improves, it opens up possibilities for non-pharmacological treatments and the need to focus on specific phases of depression, since the objectives for treatment depend on the phase of depression (Alexopoulos, 1996). Early recognition and treatment of depression can protect against subsequent decline (Penninx et al., 2000). The importance of the time factor in clinical decision making cannot be underestimated .

The third theme comprises the contextual thinking and the direction it takes when constructing interpretations of hearing. Many of the primary care physicians tended to construct their interpretation by drawing away from individual patients and relying more on their professional experiences of similar cases. Patients' situations were characterized as "life crisis" or "grief reaction" and were accompanied by treatment suggestions outlined in impersonal terms. Some primary care doctors may describe the symptoms of the patient in terms that may be "mistaken" in psychiatric terms (eg. "psychological problems" instead of "depression") but the definition may, however, be valid in the context of care: the doctor has recognized the unpleasant condition of the patient (Armstrong, 1996).

In this study, specific psychological interventions were rarely suggested by primary care physicians as observed earlier (Crawford et al., 1998), whereas the psychiatrists seemed to work on a more detailed and personal level, emphasizing careful individualized interviews with the patients. Psychiatrists are usually faced with patients who have sought them out because of personal problems. Thus, asking personal questions is more appropriate for psychiatrists than primary care physicians, whom patients usually see for physical complaints. With regard to primary care physicians, this study suggests that the different contextual approaches to emotional concerns arise from the dilemma repeatedly faced by the primary care physician, namely, the tension between neutrality towards and intervention in the patient’s personal life.

8 Recommendations

A sufficient level of core training in the provision of mental health care to elderly patients must be available for all disciplines - primary care, nursing, psychiatry, psychology, and social work. Basic training programmes for new personnel and continuing education for existing personnel are necessary, and should take account the continuous turnover of staff. Speciality training should be available in each of the professions.

The use of knowledge tests can identify strong and weak areas of professional knowledge and encourage individual learning, as well as motivate learners for other forms of education. Survey of trainees' previous knowledge level is recommended, as well as educational needs assessment. The specific training areas of psychogeriatric knowledge for primary health care groups arising from this study were clinical assessment and psychopharmacology. On the basis of the single profession focus groups, the training focuses to emerge for primary care physicians were psychiatric assessment, medication and suitable psychological interventions. In training situations, primary care physicians should be encouraged to work towards more personal definitions of the problems presented in order to provide individualized treatment to their depressed elderly patients and also for patients who do not regard themselves as ill. Particular focus on the phase and urgency of depression might prove a valuable addition to the assessment process. For psychiatrists, appropriate training objectives would include improving skills to manage patients with coexisting medical disorders and more knowledge about local services to improve local multiprofessional collaboration.

One educational option would be to form a shared training for primary care for physicians and psychiatrists to promote collaboration on improving practices through multiple perspectives. The aim would not be to formulate a single treatment model but to learn from each other's way of working and experience. The need for smaller and more intensive studies of why the psychiatrist and general practitioner agree or disagree about the patient and whether this has any detectable effect upon the outcome is another challenge for future research.

Multidisciplinary educational approaches are useful especially if the professional roles and contributions of the participants are identified and the approach applied is flexible enough. There should be an emphasis both on flexibility of training and on arranging for a suitable CPD to meet the needs of the individual trainee.

It may be useful to emphasize learning about utilizing relevant practice guidelines, the importance of the multivoicedness prevailing in clinical situations, and engaging in adequate follow-up of the patient outcome.

The results of this study suggest that even more important may be to encourage open discussion about clinical reasoning and to explore the conceptual models that guide decision making in primary and secondary care. Primary-secondary care collaboration is an important prerequisite for effective continuous care of many elderly patients with mental disorders. To achieve a functional two-way partnership, both sides must assess their role and learn to appreciate the variety of factors influencing clinical decision making in various working environments. The psychiatrist or geriatric psychiatrist should not attempt as a trainer to teach primary care doctors to work in the same ways they do themselves. CME of primary care physicians as well as other health professionals should cover such treatment options that are applicable in primary care.

9 Acknowledgements

This work was carried out at the Department of Psychiatry, Helsinki University Central Hospital, and at Helsinki Western Health Centre.

I wish to express my deepest gratitude to my supervisors, Docent Matti Viukari, MD and Professor Hannu Koponen, MD for guiding my work thoughout all these years. Docent Viukari introduced research activities as a natural element in the work of a geriatric psychiatrist. Professor Koponen's gentle and consistent supervision allowed me to succeed in completing this study.

Profound thanks go to my official reviewers, Professor Raimo Sulkava, MD and Docent Teuvo Koskinen, MD, for their precise work, suggestions and comments.

I have the highest appreciation for my co-authors' contribution to this work. Upu Kiviharju-Rissanen, MNSc was a constant source of inspiration in practical educational issues and brought a sophisticated clinical nursing perspective to our work. Long and detailed discussions with Ritva Engeström, PhD on qualitative research and communications studies connected with the medical profession were both interesting and valuable. I also want to express gratitude to my colleague Maija Savijärvi, MD for her contribution to the data analysis in study IV. Our Old Age Psychiatry unit with all its enthusiasm was a lively and creative work environment.

I want to thank Professor Reijo Tilvis, MD for his insightful and practical support and guidance at the mid-stage of the study. The comments from Professor Terttu Gröhn, PhD on the evaluation of education in studies I-III were well appreciated. Professor Robert Howard at the Institute of Psychiatry, London, was very helpful with his critical comments regarding study IV.

Several persons from the City of Helsinki Health Department offered valuable assistance during this study. We were blessed to have Kirsi Kinnunen, MD, as a co-trainer for the educational events described in studies I-III. The health directors and chief doctors of the participating health districts

were supportive of the study, which made the practical arrangements possible. I am highly indebted to Riitta Simoila, PhD, for her advice and encouragement as the thesis neared completion.

I am deeply grateful to all the Helsinki health and social care personnel who participated in this study. It has been an encouraging and inspiring experience to share such a worthwhile learning process and to learn so much about each other's ways of thinking and working.

My warm thanks go to the librarian Eeva-Liisa Aatola, Lapinlahti Hospital for her asssistance in litterature searches.

My thanks to Richard Burton BSc for his expert language editing of the earlier publications and this thesis.

I wish to thank the City of Helsinki for supporting financially this study.

I also want to extend my warmest thanks to my family for all their support and practical advice during this study process.

Helsinki, May 2003

Tuula Saarela

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